NetworX NX-4

Installation Manual

CONTENTS

CONTENTS **2**

GENERAL INFORMATION **4**

ORDERING INFORMATION **4**

FEATURE DEFINITIONS **5**

PROGRAMMING THE NX-4 KEYPADS **12**

PROGRAMMING THE NX-4 LED KEYPADS 12
PROGRAMMING THE NX-148 LCD KEYPADS 16
KEYPAD FUNCTIONS FOR THE NX-148 LCD KEYPAD 19

PROGRAMMING THE NX-4 CONTROL PANEL **23**

PROGRAMMING THE NX-4 CONTROL PANEL VIA THE LED KEYPAD 23
ENTERING THE PROGRAM MODE *23*
SELECTING THE MODULE TO PROGRAM *23*
PROGRAMMING A LOCATION *23*
EXITING A LOCATION *23*
EXITING THE PROGRAM MODE *24*
PROGRAMMING DATA *24*
LOADING FACTORY DEFAULTS *25*
ENROLLING MODULES AND KEYPADS *25*
PROGRAMMING THE NX-4 CONTROL PANEL VIA LCD KEYPAD 27
ENTERING THE PROGRAM MODE *27*
SELECTING THE MODULE TO PROGRAM *27*
PROGRAMMING A LOCATION *27*
EXITING THE PROGRAM MODE *29*
LOADING FACTORY DEFAULTS *29*
ENROLLING MODULES AND KEYPADS *29*

IMPORTANT REMARKS **30**

TAMPER MEMORIZATION 30
DISABLING TAMPER ALARMS IN PROGRAM MODE 30
KEYPAD TAMPER LOCKOUT 30

CONTROL PANEL PROGRAMMING LOCATIONS **31**

TELEPHONE NUMBER 1 31
FORMAT SELECTIONS 32
REPORTING EVENTS TO PHONE NUMBER 1 33
TELEPHONE NUMBER 2 34
REPORTING EVENTS TO PHONE NUMBER 2 35
REPORTING EVENTS TO PHONE NUMBER 3 37
SPECIAL FORMATS 38
DOWNLOAD PARAMETERS 39
FEATURE AND REPORT SELECTIONS 40
ENTRY/EXIT TIMERS 41
ZONE CONFIGURATIONS 42
GENERAL OPTIONS 44
PROGRAMMING THE OUTPUTS 47
SETUP FOR AUTO-TEST, AUTO-ARM AND OPENING/CLOSING TIMES 49
COMMUNICATOR CODES FOR SLOW SPEED FORMATS ONLY 51
PROGRAMMING ZONE CONFIGURATION GROUPS 58

NX-4 PROGRAMMING WORKSHEETS **66**

NX-4 WIRING DIAGRAM **75**

TERMINAL DESCRIPTION **76**

TECHNICAL SPECIFICATIONS **77**

TECHNICAL SPECIFICATIONS NX-4 77
TECHNICAL SPECIFICATIONS NX-108, NX-116, NX-124 77
TECHNICAL SPECIFICATIONS NX-1308, NX-1316, NX-1324 78
TECHNICAL SPECIFICATIONS NX-148 78

APPENDIX 1: REPORTING FIXED CODES IN CONTACT-ID AND SIA **79**

APPENDIX 2: REPORTING ZONE CODES IN SIA OR CONTACT ID **80**

APPENDIX 3: EXPANDER NUMBERS FOR REPORTING EXPANDER TROUBLE **82**

KEYPADS 82

CE DECLARATION **83**

GENERAL INFORMATION

The NX-4 NetworX from Caddx represents a new approach to the design of security systems. The NX-4 is probably the most flexible, durable, and user-friendly control panel ever seen in our industry. Its features include sophisticated software enabling as many as 8 users to interface with 4 zones, wireless expandable up to 8 zones, with access, audio verification, and input/output modules, all reported with SIA and Contact ID formats which are extremely fast and very comprehensive. Thanks to the NetworX design, a fully loaded system can be housed in one single metal enclosure, establishing for the first time, a logical solution and design response to modular systems. One module can be added to expand the capabilities of the NX-4.

ORDERING INFORMATION

For detailed ordering information and part numbers, please refer to the SLC Distribution price list of the Caddx product range.

FEATURE DEFINITIONS

Abort
If this option is enabled, the NX-4 will wait the programmed number of seconds (0-255) in location 40 prior to sending an alarm. During this delay time, the "Cancel" LED will flash. To abort the report, type in a code and press the [Cancel] key. The LED will go out. If the report is not aborted within the allotted time, the LED will go out when the report is sent. The dialler delay is programmed at **location 40, segment 7**. Each zone can be defined as a "dialler delay zone" by defining the relevant option in **segment 2** of the appropriate zone configuration group (see locations 110-149).

AC fail / low battery report/warning
The NX-4 can be programmed to report an AC failure and/or low battery conditions to the central station. It can also be programmed to sound the keypad immediately when the condition is detected. The AC failure report/warning can be delayed (see locations 37, 39 and 40).

AC power / low battery sounder alert
If this option is enabled, the NX-4 will beep the keypad sounder upon arming or disarming, if the AC power is not present or if a low battery has been detected (see location 23, segment 2).

Arm / disarm codes
The NX-4 may have 8 four- or six-digit codes to arm/disarm the control panel. All the codes must have the same number of digits. The factory default for user 1 is **[1]-[2]-[3]-[4]** when using a 4-digit code, or **[1]-[2]-[3]-[4]-[5]-[6]** for a 6-digit code. This code can then be used to enter the new arm/disarm codes (see location 41).

Automatic arming
If this option is programmed, the NX-4 will auto arm at a specified time. At that time, the keypad will beep for 50 seconds before the panel arms. If the arming process is stopped by typing a code on the keypad, the NX-4 will attempt to arm 45 minutes later. This time will be extended if there is any activity in the building which causes the "Ready" LED to be turned off and on. The auto arming of a partition can be programmed so that it is silent. If closing reports are sent, the user code will be 97 (see locations 23 segment 2, and 52-55).

Automatic bypass / instant arming
When this option is enabled, the control panel can automatically bypass interior follower zones if no exit is detected during the exit delay time. Entry delay zones can also be made instant (see location 23, segments 1 and 2).

Auto-test
This feature will cause the panel to call the central station, in order to report a communicator test at a specified interval (see location 51). Also, the auto-test report may be enabled ONLY when the control panel is armed see location 37 segment 4).

Auxiliary outputs
The NX-4 has two programmable outputs which can be used to activate LED's, sirens, flashes, etc. (see the terminal description and locations 47-48).

Auxiliary power overcurrent
The NX-4 will light up the “Service” LED on the keypad whenever too much current is being drawn from any device powered by the system. This condition can be reported to the central station (see location 37 segment 3).

Box tamper
The NX-4 has an input for a normally closed tamper switch (see wiring diagram). The box tamper can be programmed to report, and/or sound the siren and/or the keypad. These terminals can be enabled or disabled by programming (see locations 37 segment 2 and 3, and location 39).

Built In siren driver
The NX-4 has a built-in 112 dB siren driver. If desired, this built-in driver can easily be converted to a 1 amp voltage output by programming (see location 37 segment 2).

Bypass toggle
This feature will enable the end user to toggle (turn on or off) the bypass of an interior zone while the system is armed. This is done by pressing the [Bypass] key (see location 23 segment 2).

Call back
When this feature is enabled, the control panel will use the call back phone number to call the download computer before it begins a download (see locations 21 and 22).

Cancel
If this feature is enabled, the NX-4 will send a “Cancel” report when the system is disarmed and the [Cancel] button is pressed within 5 minutes of an alarm. Once the [Cancel] key has been pressed, the “Cancel” LED will light up until the central station acknowledges the “Cancel” report (see location 23 segment 3).

Chime
This feature can be turned on and off using the “chime” key. When the system is in the disarmed state, a trip on selected zones will generate either a DING-DONG or a single tone through the keypad sounder (depending on the keypad programming). This lowest level of security can be enabled by zone; this is done by programming the appropriate zone configuration for it, or by customizing its zone configuration (see locations 111-149).

Code required options
The NX-4 can be programmed to require a code in order to bypass zones and/or to initiate a download using the [*]-[9]-[8] or [*]-[9]-[9] function (see locations 23 segment 2 and 41).

Communication formats
The NX-4 can report in multiple formats. You are recommended to use Contact ID or SIA formats if possible. If you wish to report to a pager or to a central station in a 4+2 format, you must program each code that is to be reported (see locations 56-83 and 111-149).

Configuration groups
The NX-4 has 20 configuration groups that determine how each zone will function and report. The default configuration groups are listed on pages 43-44. All configuration groups are fully programmable (via downloading and via the keypad) (see locations 111-149).

Cross zoning
This feature requires two or more trips within a specified time on one or more zones that are programmed as “cross zones” before it will report an alarm. During the time between trips, the NX-4 can be programmed to sound the keypad and/or the siren. The NX-4 can also be programmed to report an alarm after two or more trips on the same zone. **The first trip on a cross-zone is also logged** (see locations 37 segment 1, 39, 40 and 110-149).

Daylight savings time
The NX-4 has the possibility to switch automatically from summer to wintertime and vice versa. This option will move the clock backward on the last Sunday of October (3 a.m. becomes 2 a.m.) and will move the clock forward on the last Sunday of March (2 a.m. becomes 3 a.m.) (see location 37, segment 5, option 8).

Dual / split / multiple reports
The NX-4 can send communication reports to three different phone numbers for dual, split or multiple reports: these can be selected by event (see locations 4, 10, and 16).

Duress code
If a duress code is programmed, the NX-4 will send a duress signal whenever the panel is armed or disarmed with this code. If open/close reports are sent, the user code will be 254 (see location 44).

Dynamic battery test
The NX-4 can be programmed to perform a dynamic battery test for a selected duration when the panel is armed or disarmed for the first time each day. The NX-4 can also be programmed to perform a ‘missing battery’ test every 12 seconds (see locations 37 segments 2 and 3 and location 40).

Entry-guard
This unique low level arming mode has been developed to reduce the most common source of false alarms. When armed in the “Stay Instant” mode, opening any zone designated as an “Entry Guard Zone” will initiate the keypad sounder and start the entry delay before generating an alarm. All the other zones will function as normal. This arming mode will encourage system owners to use their systems more frequently when the premises are occupied (see locations 111-149).

Exit error
If this option is enabled, the NX-4 will send an “Exit Error Report” when an entry/exit zone is faulted, at the instant the exit delay expires. This report will be sent together with the user number that was used to arm the system, provided that the panel is not disarmed before the entry delay expires. The alarm report will also be sent. Even if this feature is not enabled, the siren will sound if any entry/exit zone is faulted, as soon as the exit delay expires (see location 23 segment 3).

Expander trouble
The NX-4 will report expander trouble to the central station if this option is enabled. This condition will light up the “Service” LED on the keypad, even if it is not reported.

NOTE: The keypads are considered to be expanders (see location 37 segment 3).

Fail to communicate
The NX-4 will light up the “Service” LED if a report fails to reach the central station. If this option is enabled, a fail to communicate code will be reported when the next report is successfully communicated. **A fail to communicate is always logged as “data lost”** (see location 37 segment 4).

Final set door
If this feature is enabled, it will only be applicable for secondary entry/exit zones (f.e. configuration group 9 or 19). If the final set door option is enabled, the exit time will immediately expire as soon as the secondary entry/exit zone (type 9 or 19) becomes ready again. This feature can only be used in combination with magnetic contracts (see location 23, segment 2, option 8).

Fire alarm verification
When this feature is enabled, the NX-4 will verify a fire alarm by requiring more than one trip on a smoke detector (the same or another one) within a specified time (120-255 seconds) before it generates an alarm (see location 40 segment 9).

Force arming
If this option is enabled, the NX-4 can be "Force Armed" when zones have been violated. In this condition, the "Ready" LED will flash if a "Force Armable" zone is not secure. At the end of the exit delay, these zones will become bypassed. If these zones become secured at any time during the arming cycle, they will be unbypassed and will become active in the system. If "Bypass Report" is enabled, the force arming zones can be programmed to report bypass when they are force armed (default), or not to report bypass even if "Bypass Report" is enabled (see locations 37 segment 5, and 111-149 segment 2).

Group bypass
A designated group of zones can be programmed to bypass by pressing [Bypass]-[0]-[0]-[Bypass] prior to arming (see locations 111-149 segment 2).

Immediate restore by zone
The NX-4 can be programmed to send alarm and restore reports as soon as they occur, or to wait until the siren time has expired or the system has been disarmed. (see location 37 segment 2).

Internal event log
Up to 185 events can be stored in memory together with the date and time of the event. These events can be viewed later on via the LCD keypad, or by downloading. All reportable events are reported to the log.

Keypad activated panics
The NX-4 has three keypad activated panics that will send reports to the central station, auxiliary 1 (Fire), auxiliary 2 (Medical) and keypad panic. Auxiliary 1 will activate the steady (Fire) siren, auxiliary 2 will sound the keypad, and the keypad panic can be programmed to be silent or audible (see location 23 segment 1).

Keypad shutdown mode
This feature will extinguish all the LED's on the keypad, except the "Power" LED, after 60 seconds have elapsed without a keypress. Pressing a valid user code (not an installer code) will light up all the LED's (see location 41, segment 1, option 5). This option requires bilingual LCD keypads. This option is an alternative for LED-extinguish.

Keypad sounder control
The NX-4 can be programmed to sound the keypad sounder for certain events (see location 39).

Keypad tamper
If this option is enabled, the NX-4 will disable the keypad for 60 seconds, and will communicate a tamper signal to the central station whenever 30 keypresses are entered without producing a valid code (see location 23 segment 1).

Keyswitch arm/disarm
Any zone on the NX-4 can be programmed as a momentary or maintained keyswitch zone. If a zone has been programmed as a momentary keyswitch, momentary shorts on this zone will arm/disarm the control. A zone can be also being programmed as a maintained keyswitch. The control panel will be armed as long as such a zone is shorted. If opening/closing reports are sent, the user code will be 99 (see “default zone configurations”).

LED extinguish
This feature will extinguish all the LED’s on the keypad, except the “Power” LED, after 60 seconds (Norway / Sweden: 30 seconds) have elapsed without a keypress. Pressing any numeric key will light up all the LED’s (see location 23 segment 2).

Local programming lockout
This feature will disable programming of all locations, or for specified locations, from the keypad (see location 21).

Log full report
A report can be sent to the central station when the event log is full (see location 37 segment 4).

Lost clock service light
The NX-4 can be programmed to light up the “Service” LED on a LED keypad or give a “Service” message on a LCD keypad when the internal clock time is invalid due to power loss. On LCD keypads, if programmed to show the system time, a “Set Clock, *97” message will always be displayed (see location 37 segment 5).

Manual test
The NX-4 can be programmed to perform a bell and/or communicator test; to do this, enter [*]-[4]-[4] while the system is in the disarmed state. Each time that [*]-[4]-[4] is entered, a dynamic battery test will also be performed (see location 37 segment 2).

On board zone disable
The four zones on the NX-4 panel can be disabled, in order to obtain a completely wireless alarm system. A mix of hardwired and wireless zones for zones 1-4 is also possible (see location 37 segment 5).

Program code
The factory default for the “Go To Program” code is [9]-[7]-[1]-[3] when using a 4-digit code; or, if the 6-digit option is used, the default is [9]-[7]-[1]-[3]-[0]-[0]. The program code can also be used as an arm/disarm code. If it is used as an arm/disarm code, and if open/close reports are sent, the user code will be 255 (see location 43).

Quick arm feature
The NX-4 has a single-button “Quick Arm” feature which can be used to arm the system by pressing the [Exit] key or the [Stay] key on the keypad. If closing reports are sent, the user code will be 98 (see location 23 segment 1).

Recent closing
If this option is enabled, the NX-4 will send a “Recent Closing Report” to the central station if an alarm occurs within 5 minutes after the panel is armed. The user number that was used to arm the system will also be sent (see location 23 segment 3).

Re-exit
The NX-4 can restart the exit delay for a quick exit without the need to disarm the system; this is done by pressing the [Exit] key while the system is still armed (= after exit delay has expired). The re-exit is also logged (see location 23 segment 1).

Shutdown
This mode will cause the keypads to extinguish all LED's, except the "Power" LED, and to refuse keypresses (see location 21).

Siren blast for arming
The NX-4 can be programmed to give a one-second siren blast when the panel is armed, at the end of the exit delay, or when the central station receiver acknowledges the closing report. It can also give one blast for remote (keyswitch) arming, and two blasts for remote disarming (see location 37 segment 1).

Siren supervision
The NX-4 has a "Siren Supervision" circuit that will constantly monitor the siren on the NX-4; it can also be programmed to report if the wires are cut (see location 37 segment 3).

Silent exit option
The exit delay can be silenced by pressing [*]-[Exit] before arming the control panel, or when using the re-exit feature. The exit delay can also be silenced permanently (see location 37 segment 5).

Start/end programming and end downloading
A report can be sent when local programming is started and ended. A report can also be sent when a download session ends (see location 37 segment 4).

Swinger shutdown
This feature allows one or more zones to be bypassed automatically after a specified number of alarms. If immediate restore is enabled in location 37, the alarms (and restores, if this option is enabled) will be sent as they occur. If immediate restore is not enabled, a second or subsequent alarm will not be sent until the siren times out (see location 37 segment 2 and location 38).

Two call answering machine defeat
If this option is enabled, two telephone calls must be made to the premises in order to defeat an answering machine. On the first call, let the phone ring one or two times. The control panel will detect these rings and start a 45-second timer; during this time, the control panel will answer the next call on the first ring. This is not recommended for commercial applications (see location 21).

User authorization to enter program mode
Entering program mode via the installer code is only possible within 60 seconds following a user code entry (for Norway/Sweden: 30 seconds) (see location 41, segment 1, option 6).

Walktest mode
If enabled, entering [*]-[chime] followed by the master code will allow a walk-through zone test where all zones become silent and local (non-reporting). Each time a zone is faulted, the zone light on the LED keypad will illuminate and the chime will sound. The number of the faulted zone (1) will be displayed on the LCD keypad. It will also be entered in alarm memory and the internal log. To exit at any time during this mode, enter the master. Otherwise, the "Walk-Test Mode" will automatically exit after 15 minutes **(**see location 41). Walktest mode is not possible if any partition is armed or if the communicator is active.

Wireless sensor absent/low battery
The NX-4 will send a report to the central station when a wireless sensor has detected a low battery, or has not reported to the receiver. The "Service" LED will light up when either of these conditions exists (see location 37 segment 4).

Zone bypassed sounder alert
With this feature enabled, if a zone is bypassed, the NX-4 will beep the keypad sounder when the zone is armed (see location 23 segment 2).

PROGRAMMING THE NX-4 KEYPADS

Programming the NX-4 LED keypads

This section describes how to program the address and partition for each keypad, and it also explains the options that are available. The address of the keypad is important because the panel uses it to supervise the keypads.

The factory default for the Master code is **[1]-[2]-[3]-[4]** when using a 4-digit code, **or [1]-[2]-[3]-[4]-[5]-[6]** for a 6-digit code. The factory default for the "Go To Program" code is **[9]-[7]-[1]-[3]** for a 4-digit code, or **[9]-[7]-[1]-[3]-[0]-[0]** for a 6-digit code.

[*]-[9]-[3] SET KEYPAD OPTIONS

1. Enter **[*]-[9]-[3] [program code]- the "Service" LED will flash**.
2. LED's 1-8 can now be toggled on/off to enable/disable the following functions:
3. After enabling/disabling the desired functions press [*]

LED	Keypad feature enabled
1	**Box tamper on**
2	**Enable silent keypad option (no entry/exit delay sounder, no chime)**
3	**Enable Ding Dong sound for chime** - If this is off, the chime will be a single tone (see location 40).
4	**Enable keypress silence option** (Silences the pulsing keypad sounder for 5 seconds when a key is pressed).
5	**Enable armed status suppression** (Will not allow the keypad to display faulted or bypassed zones when the system is armed).
6	**Enable panic, fire, medical beep tone** (Will sound a short beep to verify that the keypress has been accepted).
7	**Suppresses the "Service" LED** (Will not allow the "Service" LED to light up for any reason. If there is a system malfunction (trouble), pressing [*]-[2] will still display the service menu).
8	**Enable multi-partition viewing** (Enables temporary viewing of all partitions, by pressing [*]-[1]-[partition number]).

[*]-[9]-[4] **SET KEYPAD NUMBER AND PARTITION**

1. Enter [*]-[9]-[4]-[program code]- the “Service” LED and the “Instant” LED will flash.
2. Enter the keypad number (1-2).
3. Press [*]- the “Instant” LED will illuminate steadily, and the “Service” LED will carry on flashing.
4. Enter [1]. The keypad will automatically exit this mode now).

[*]-[9]-[5] **SET ELAPSED INCREMENTS (HOURS/DAYS) SINCE LAST AUTOTEST**

1. Enter [*]-[9]-[5]-[program code]- the “Service” LED will flash.
2. Enter [100's digit] -[10's digit]-[1's digit]-[#].

[*]-[9]-[6] **SET SYSTEM DATE**

1. Enter [*]-[9]-[6]- the “Service” LED will flash.
2. Enter [master code]-[day of week (1=Sun)]-[month 10's digit]-[month 1's digit]-[day 10's digit].
3. [day 1's digit] -[year 10's digit]-[year 1's digit].

[*]-[9]-[7] **SET SYSTEM CLOCK**

1. Enter [*]-[9]-[7]- the “Service” LED will flash.
2. Enter [master code]-[hour 10's digit]-[hour 1's digit]-[minutes 10's digit]-[minutes 1's digit].

Note: the clock is a 24-hour clock.

[*]-[9]-[8] **INITIATE CALLBACK**

Pressing [*]-[9]-[8] while the system is disarmed will cause the control panel to perform a callback for a download.

NOTE: A VALID USER CODE MAY BE REQUIRED AFTER [*]-[9]-[8], IF ENABLED IN LOCATION 41.

[*]-[9]-[9] **ANSWER DOWNLOAD**

Pressing [*]-[9]-[9] while the system is disarmed will cause the control panel to seize the phone line for a download.

NOTE: A VALID USER CODE MAY BE REQUIRED AFTER [*]-[9]-[9], IF ENABLED IN LOCATION 41.

[*]-[5] CHANGING USER CODES

1. Enter [*]-[5]-[master code]- the “Ready” LED will flash.
2. Enter the 2 digit user number (always 2 digits, such as “03” for user 3)- the “Ready” LED will illuminate steadily.
3. Enter the new user code designated for the person in question - the “Ready” LED will flash, indicating that the code has been accepted. If the code is rejected, the sounder will beep 3 times.
4. If another user code needs to be programmed, return to step 2.
5. Press [#] while the “Ready” LED is flashing in order to exit the user code programming mode.
6. Pressing four times (for 4-digit code) can erase a user code or six times (for 6-digit code) the “Cancel” key.

[*]-[6] ASSIGNING AUTHORITY LEVEL

1. Enter [*]-[6]-[master code]- the “Ready” LED will flash.
2. Enter [2 digit user number] (always 2 digits, such as 03 for user 3)- the “Ready” LED will illuminate steadily and the “Instant” LED will flash. Refer to the chart below for the description of each LED. Turn on the LED for the features that you want.

LED	ATTRIBUTES IF LED 8 IS OFF	LED	ATTRIBUTES IF LED 8 IS ON
1	Reserved	1	Activate output 1
2	Arm only	2	Activate output 2
3	Arm only after closing window	3	Activate output 3
4	Master arm/disarm (can program other codes)	4	Activate output 4
5	Arm/disarm code	5	Arm/disarm code
6	Allowed to bypass zones (see location 23)	6	Allowed to bypass zones (see location 23)
7	Code will send open / close reports	7	Code will send open / close reports
8	If this LED is on, LED’s 1-7 will use the chart too the right	8	If this LED is off, LED’s 1-7 will use the chart on the left

1. Enter [*]: The “Instant” LED will illuminate steadily.

   This moves you to the ‘partition enable’. Since the NX-4 does not have partitions this function is not used and may therefore not be changed.

2. Enter [*]:

   This brings you back to step 2 above. At this point, you may enter another user number to which you can assign attributes. You may continue this procedure until you have assigned authority levels to all user numbers; otherwise, you may press the [#] key to exit the assigning authority level program.

[*]-[CHIME] ACTIVATING WALKTEST:

1. Enter [*]-[CHIME]
2. Enter [Master code]
3. Activate all sensors to test. Each activation of a sensor is confirmed with a “ding dong” sound with a corresponding flashing zone-indicator.
4. Enter [Master code]. Herewith the walktest-mode is left.

Remark: Walktest mode is not possible if the system is armed or if the communicator is active.

Additional keypad functions are described in the appropriate user manual

Programming the NX-148 LCD keypads

This section describes how to program the address and partition for each keypad, and it also explains the options that are available. The address of the keypad is important because the panel uses it to supervise the keypads.

The factory default for the Master code is **[1]-[2]-[3]-[4]** when using a 4-digit code, **or [1]-[2]-[3]-[4]-[5]-[6]** for a 6-digit code. The factory default for the "Go To Program" code is **[9]-[7]-[1]-[3]** when using a 4-digit code, or **[9]-[7]-[1]-[3]-[0]-[0]** for a 6-digit code.

[*]-[9]-[1] ADJUSTING THE VIEW / BRIGHTNESS OF THE LCD

1.	Enter [*]-[9]-[1]	The LCD screen will prompt for a "master" code.
2.	Enter [master code]	The LCD will now prompt you to increase or reduce the viewing angle. By using the scroll keys to the right of the LCD, you can increase or reduce the text-viewing angle.
3.	To advance to the brightness option, press [*]	The LCD will prompt you to brighten or dim the LCD lighting. Use the scroll keys again to set the desired brightness. When completed, exit by pressing [*].

[*]-[9]-[2] PROGRAMMING CUSTOM MESSAGES IN THE KEYPAD

1.	Enter [*]-[9]-[2]	The LCD screen will prompt for the "Go To Program" code.
2.	Enter [program code]	The LCD will now prompt you to enter the message number followed by [#]. Zones 1 through 192 custom messages are message numbers 1-192 respectively (for NX-4: only zones 1-8 are applicable). Message 193 - Custom message top line. Message 194 - Custom message bottom line. Message 195 – Shutdown message top line. Message 196 – Shutdown message bottom line.
3.	Enter message number to edit, followed by [#]	The LCD will display the zone number on the top line. The zone description will be displayed on the bottom line. Use the instructions on page 29-30 to edit character data.

4. When finished, exit by pressing [EXIT] while the LCD screen is prompting for a zone message #. Any changes will automatically be copied to all other LCD keypads in the system. NOTE: If you want a LCD keypad to have a different custom message, you must enable custom message lock under the [*]-[9]-[3] function.

[*]-[9]-[3] SET KEYPAD OPTIONS

1. Enter [*]-[9]-[3]
2. Enter [program code]

The LCD screen will prompt for a code.

The LCD will now prompt you through the options listed in the following chart. The current state of the option will be shown in the lower right corner of the display. Press [*] to exit the current state without any changes. Otherwise, follow the directions on the bottom line to select the desired option. When finished, press [*] to move to the next option.

OPT	KEYPAD FEATURES
1	**CASE TAMPER ON?** Tamper switch of keypad housing active
2	**SILENT KEYPAD?** Enable silent keypad option. If this is on, silent keypad is enabled for entry/exit delay and chime.
3	**DING-DONG CHIME?** Enable Ding-Dong sound for chime. If this is off, the chime will be a single tone.
4	**5 SEC. SILENCE?** Enable keypress silence option. Silences the pulsing keypad sounder for 5 seconds when a key is pressed.
5	**ARMED ZONE INFO?** Enable armed status suppression. If this is on, the keypad will not display faulted or bypassed zones when the system is armed.
6	**BEEP ON PANICS?** Enable panic, fire, medical beep tone. Will sound a short beep to verify that the keypress has been accepted.
7	**DISABLE SERVICE?** Suppresses the “Service” Message. This will not allow the “Service” message to be displayed for any reason. If there is a system malfunction (trouble), pressing [*]-[2] will still display the “Service” menu.
8	**MASTER KEYPAD?** Enable multi-partition mode.
9	**CUSTOM MESSAGE?** Enable custom message display.
10	**CLOCK?** Enable clock display.
11	**CUSTOM MSG. LOCK?** Enable custom message lock. Prevents the custom message from being overwritten during keypad copy.
12	**SELECT AN OPTION** 1234 - - - -

Remark :	In the menu “Select an option” 8 additional options can be selected. The options 5 until 8 are not used for the moment and may therefore not be selected. The options 1 and 4 are described below:
Option 1 :	On the LCD screen “press * for help”. By this the status of the system and the message “press * for help” are alternately displayed on the LCD screen. This is only to inform the user of the user’s menu.
Option 2 :	Light continuously on. By this the lights of the LCD display and the keys will continue to light up, independently of the programming of the control panel. (Adr 23, Segm. 2, option 1 = turn off the lights after one minute of inactivity).
Option 3 :	ON if PIN should be hidden when programming user codes.
Option 4 :	ON suppresses beeps when an RF transmission is lost.
Option 5-8:	Reserved **(Do not program).**

[*]-[9]-[4] SET KEYPAD NUMBER AND PARTITION

1.	Enter [*]-[9]-[4]	The LCD screen will prompt for a code.
2.	Enter [program code]	The LCD will now prompt you for the keypad number followed by [*]. The current keypad number will be displayed in the lower right hand corner.
3.	Enter the keypad number followed by [*]	The LCD will now prompt you for the partition number. The current partition will be displayed in the lower right hand corner. Since the NX-4 does not have partitions, all keypads must belong to partition 1.
4.	Enter the partition number for the keypad	The keypad will automatically exit this mode now.

Keypad functions for the NX-148 LCD keypad

The LCD keypads have a bilingual user's interface. As a result, you can simply select a user's function on the menu. You can consult the menu by entering the [*] key.

The user of the system can easily switch from one user's interface to another and the other way around.

To select a user's function following steps have to be performed.

Step 1 Enter the [*] key until the function you want, appears on the LCD display / screen.

Ex.

Select an option
90 = Log Review

Step 2 To select the option, you must press the appropriate option number next to the option (ex. Consulting Log Review = option 90)

To exit the user's menu, press the [#] key.

If you already know the option (ex. Log Review = 90) you can immediately select the wanted option by pressing the [*]-[9]-[0] keys. By doing this you don't have to browse through the user's menu.

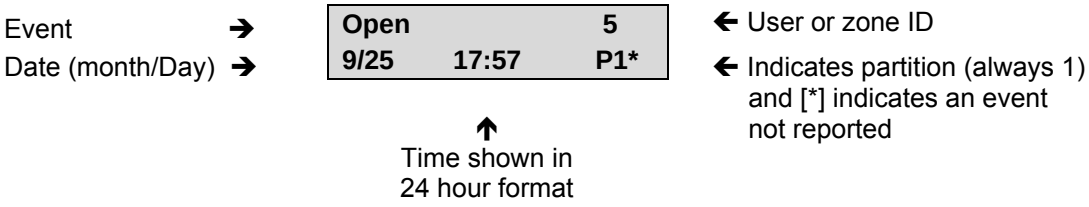
In the following table you will find all functions that can be executed by the user.

USER'S MENU		
Option	**Description English (1)**	**Description English (2)**
▲▼	Zone Review	Zone Review
0	Set Tone	Set Tone
1	Master Mode	Master Mode
2	Service Check	Service Check
3	Alarm Memory	Alarm Memory
41	Telephone # 1	Telephone # 1
42	Telephone # 2	Telephone # 2
43	Telephone # 3	Telephone # 3
44	Test	Test
45	Display test	Display test
46	Light Control	Light Control
49	English (2)	English (1)
5	User PIN	User PIN
6	User Authority	User Authority
7	Detector Reset	Detector Reset
90	Log Review	Log Review
91	View Settings	View Settings
97	Set Date/Time	Set Date/Time
CHIME	Walktest	Walktest
EXIT	Silent Exit	Silent Exit

[*]-[9]-[0] READING THE EVENT LOG

The NX-4 has a 185-event log which can be retrieved using a master code. This log contains a listing of the last 185 events along with the date, time, and partition where each event occurred.

1. Press [*]-[9]-[0] — The LCD screen will prompt you for a code.
2. Enter [master code] — The LCD screen will now show the most recent event.
3. To view the events from the latest to the oldest, press the 'down' scroll key.
4. To view the events from the oldest to the latest, press the 'up' scroll key.
5. The display contains the following information.


Event
Date (month/Day)
Open 5
9/25 17:57 P1*
User or zone ID
Indicates partition (always 1) and [*] indicates an event not reported
Time shown in 24 hour format

This screen shows an opening on September 25th at 5:27 p.m. by user 5. The [*] shows that this event is not programmed for reporting to the central monitoring station.

[*]-[9]-[5] SET INCREMENTS (HOURS/DAYS) ELAPSED SINCE LAST AUTOTEST

1. Enter [*]-[9]-[5] — The LCD screen will prompt for a code.
2. Enter [program code] — The LCD will now display the elapsed time screen.
3. Enter [100's digit] -[10's digit]-[1's digit]-[#]

[*]-[9]-[7] SET SYSTEM TIME AND DATE

1. Enter [*]-[9]-[7] — The LCD screen will prompt for a code.
2. Enter [master code] — The date and time will be displayed, with the current hour flashing.
3. Use the 'up' and 'down' scroll keys to select the proper hour.
4. Enter the [*] key to move to the minutes.
5. Repeat until you have set the entire date.

[*]-[9]-[8]

Pressing [*]-[9]-[8] while the system is disarmed will cause the control panel to perform a callback for a download. NOTE: A VALID USER CODE MAY BE REQUIRED AFTER [*]-[9]-[8], IF ENABLED IN LOCATION 41 OF THE NX-4 CONTROL PANEL.

[*]-[9]-[9]

Pressing [*]-[9]-[9] while the system is disarmed will cause the control panel to seize the phone line for a download. NOTE: A VALID USER CODE MAY BE REQUIRED AFTER [*]-[9]-[9], IF ENABLED IN LOCATION 41 OF THE NX-4 CONTROL PANEL.

[*]-[▲] **VIEW ZONE STATUS**

1.	Enter [*]-[▲]	The LCD screen will display the zone status.
2.	Use the 'up' and 'down' scroll keys to browse through the descriptions.	The LCD screen will display the list of ALL zones, in sequential order by zone number.
3.	Press [#] to exit this function.	

[*]-[3] **VIEW ALARM MEMORY**

1.	Enter [*]-[3]	The LCD screen will display the zone description for the zones.
2.	Use the 'up' and 'down' scroll keys to browse through the alarm memory.	The LCD screen will display the list, in sequential order by zone number.
3.	Press [#] to exit this function.	

[*]-[4]-[5] **DISPLAY TEST**

The keyboard also provides a test function by the means of which the LCD display and all LED's are tested.

Step 1	Press [*] [4] [5]. The display and the LED's will blink.
Step 2	Press the [*] key to leave the display test.

[*]-[4]-[9] **MODIFYING LANGUAGE**

The possibility exists to modify the language on the LCD display from one language to another and the other way around.

Step 1	Press [*] [4] [9]. The LCD display switches to the other language.
Step 2	To switch back to the other language, only step 1 has to be repeated.

[*]-[5] **CHANGING USER CODES:**

1.	Enter [*]-[5]	The LCD screen will prompt for a code.
2.	Enter [master code]	The LCD screen will prompt for a user number.
3.	Enter the 2 digit user number (always 2 digits, i.e. "03" for user 3)	The LCD screen will prompt for a new code.
4.	Enter the new user code designated for the person in question. If the code is rejected, the sounder will beep three (3) times.	
5.	If another user code needs to be programmed, return to step 3.	
6.	To exit code programming, press [#] while the LCD screen is prompting for a new user number.	
7.	**REMARK: Pressing four times (for 4-digit code) can erase a user code or six times (for 6-digit code) the "Cancel" key.**	

[*]-[6] ASSIGNING AUTHORITY LEVEL

Note: You must be authorized to access the partition that you wish to add to, or remove from, another person's authority.

1.	Enter [*]-[6]	The LCD screen will prompt for a code.
2.	Enter [master code]	The LCD screen will prompt for a user number.
3.	Enter the 2 digit user number (always 2 digits, i.e. "03" for user 3)	The LCD screen will prompt for a new code. The LCD will now prompt you for the first in the following list of attributes.

PROMPTS	If prompt 1 ("Outputs used?") is answered NO, the LCD will display the four messages below	If prompt 1 ("Outputs used?") is answered YES, the LCD will display the four messages below
Outputs used?		
Open / close report?		
Bypass enable?		
Arm / disarm?		
	Master code?	Output 4 enable?
	Sched. arm only?	Output 3 enable?
	Arm only?	Output 2 enable?
	Reserved	Output 1 enable?

4	Enter a partition number.	The LCD screen will prompt you for the next user code.

Note: The default allows access to all partitions. Since the NX-4 does not have partitions, do not change anything, just press [*].

5. If another user code needs to be programmed, return to step 3.
6. To exit this feature, press [#].

[*]-[CHIME] ACTIVATING WALKTEST

1.	Enter [*]-[CHIME]	The LCD screen will prompt you for a "master code".
2.	Enter [mastercode]	The LCD screen will display the "walktest mode"
3.	Activate all sensors to test	Each activation of a sensor is confirmed with a "ding dong" sound. The zone texts of the sensors who have reacted, are displayed one by one on the screen.
4.	Enter [mastercode]	The walktest mode is left.

Remark:
1. All activations and restore conditions occurred during the walk test, can be verified by consulting the memory file (see function [*]-[9]-[0]).
2. A walk test mode is not possible if the system is armed or if the communicator is active.

PROGRAMMING THE NX-4 CONTROL PANEL

Programming the NX-4 control panel via the LED keypad

ENTERING THE PROGRAM MODE

To enter the program mode, press [*]-[8]. When you do this, the five function LED's (Stay, Chime, Exit, Bypass, and Cancel) will begin to flash. Next, enter the "Go To Program Code" (FACTORY DEFAULT IS [9]-[7]-[1]-[3]). If the "Go To Program Code" is valid, the "Service" LED will flash and the five function LED's will illuminate steadily. You are now in the program mode, ready to select the module to be programmed.

Note: it is impossible to enter program mode if the system is armed.

SELECTING THE MODULE TO PROGRAM

Since all the modules connected to the NX-4 are programmed through the keypad, the module you are programming should be the first entry. To program the NX-4 control panel, enter [0]-[#]. The [0] is the module number of the control panel and the [#] is the entry key. Other module entry numbers can be found in the corresponding manuals.

PROGRAMMING A LOCATION

Once you have entered the number of the module to be programmed, the "Armed" LED will light up, to show that it is waiting for a programming location to be entered. Any location can be accessed by directly entering the desired programming location, followed by the crosshatch (pound) [#] key. If the location you enter is valid, the "Armed" LED will go out, the "Ready" LED will light up, and the binary data for the first segment of this location will be shown by the zone LED's. While entering new data, the "Ready" LED will begin flashing to indicate that a data change is in process. The flashing will continue until the new data are stored, by pressing the [*] key. When you press the [*] key, the keypad will advance to the next segment and will display its data. Repeat this procedure until the last segment is reached. Press the [#] key to exit from this location, and the "Armed" LED will light up again - this means that it is waiting for a new programming location to be entered. If you want the next location in the sequence, press the [POLICE] key. If you want the previous location, press the [FIRE] key. If you want the same location, press the [MEDIC] key. To review the data in a location, repeat the above procedure, pressing the [*] key without any numeric data entry. Each time you press the [*] key, the programming data of the next segment will be displayed for review.

EXITING A LOCATION

After the last segment of a location has been programmed, press the [*] key to exit that location; this turns the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location. If you try to program an invalid entry for a particular segment, the keypad sounder will emit a triple error beep (beep, beep, beep), and it will remain in that segment awaiting a valid entry.

EXITING THE PROGRAM MODE

When all the desired changes in programming have been made, it is time to exit the program mode. Press the [Exit] key to exit this programming level, and go to the “Select a Module To Program” level. If no additional modules are to be programmed, press the [Exit] key again to exit the program mode. If there is a module to be programmed, you can select it by entering its address, followed by the [#] key (see “Selecting the Module To Program” above). The procedure for programming these devices is the same as for the control panel, except that the locations will be for the module selected.

Note: the timeout for the program mode is 15 minutes.

PROGRAMMING DATA

There are only two possible types of programming data. One type of data is numerical: data of this type can assume values from 0 -15 or 0 -255, depending on the location's segment. The other type is feature selection data: this data is used to turn features on or off. Use the following procedures when working with these two data types:

Numerical data: entering a number from 0-255 on the numeric keys of the system keypad programs numerical data. To view the data in a location, a binary process is used. With this process, the LED’s for zones 1 through 8 are utilised, and the numeric equivalents of their illuminated LED’s are added together to determine the data in a programming location. The numeric equivalents of these LED’s are as follows:

Zone 1 LED = 1	Zone 2 LED = 2	Zone 3 LED = 4	Zone 4 LED = 8
Zone 5 LED = 16	Zone 6 LED = 32	Zone 7 LED = 64	Zone 8 LED = 128

Example: If the numerical data to be programmed in a location is “66”, press [6]-[6] on the keypad. The LED’s for zone 2 and zone 7 will light up, showing that 66 is in this location (2 + 64 = 66). See the example p. 25.

Once the data has been programmed, press the [*] key to enter the data, and advance to the next segment of that location. After the last segment of a location has been programmed, press the [*] key to exit from that location - this turns the “Ready” LED off and the “Armed” LED on. As before, you are now ready to enter another programming location. If you try to program a number that is too large for a particular segment, the keypad sounder will emit a triple beep to indicate an error, and will remain in that segment awaiting a valid entry. Remark: On the LCD keypad, the number in the location will be displayed. For locations with a maximum of 15, the hexadecimal equivalent will be displayed in parenthesis. Example: 11 (B) or 14 (E).

Feature selection data: feature selection data will display the current condition (on or off) of eight features associated with the selected programming location and segment. If you press a button on the keypad (1 to 8) that corresponds to the “feature number” within a segment, this will toggle the feature (on/off). By pressing any numeric key between [1] and [8] to select a feature, you will make the corresponding LED light up (feature ON). Press the number again, and the LED will go out (feature OFF). You will see that numerous features can be selected from within one segment. For instance, if you want all eight features of a segment, pressing [1]-[2]-[3]-[4]-[5]-[6]-[7]-[8] will turn on LED's 1 to 8 as you press the keys, indicating that those features are enabled. After you have selected the setting of the features for this segment, press the [*] key. This will enter the data and advance automatically to the next segment of the location. When you are in the last segment of a location and you press the [*] key to enter the data, you will exit from that location as well. This will turn off the “Ready” LED, and will turn on the “Armed” LED. As before, you are now ready to enter another programming location.

LOADING FACTORY DEFAULTS

To load the factory defaults, enter the program mode using the procedure on page 23, then type **[9]-[1]-[0]-[#].** The keypad will beep 3 times to indicate that loading is in progress. The loading takes about 6 seconds.

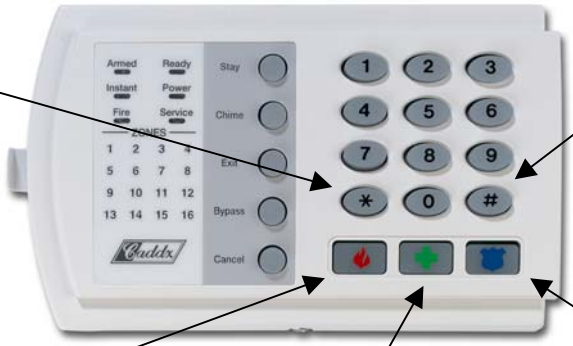
ENROLLING MODULES AND KEYPADS

For supervision purposes, the presence of all keypads, zone expanders, wireless receivers, and any other modules connected to the data terminal can automatically be found and stored in the NX-4's memory. This allows the control panel to supervise these modules. To enroll the modules, enter the program mode for the NX-4 control panel as described above. If necessary, go on to program the rest of the control panel and the devices. When you exit from program mode, the control panel will automatically enroll the devices. The enrolling process takes about 12 seconds, during which time the "Service" LED will light up. If a module has been enrolled but it is not detected by the control, the "Service" LED will light up.

PROGRAMMING EXAMPLE (Numerical data)

Zone 1 LED = 1
Zone 4 LED = 8
Data = 9

Zone 2 LED = 2
Zone 7 LED = 64
Data = 66



To change data in a segment, enter the data followed by [*]

Pressing [#] will exit a location without changing the data in the current segment

Enters the previous programming "location"

Returns to the "location" just programmed

Advances to the next programming "location"

PROGRAMMING EXAMPLE (Feature selection data)

Location 23, segment 1

1 = Quick arm
2 = Re-exit
3 = Auto bypass
4 = Silent keypad panic
5 = Audible keypad panic
6 = Keypad auxiliary 1
7 = Keypad auxiliary 2
8 = Multi-keypad tamper

Press the key on the numeric keypad that corresponds to the feature you wish to enable/disable. When a LED is “ON”, a feature is enabled, when “OFF” the feature is disabled. For example, with the 1, 5 & 7 LED’s “ON”, quick arm, audible keypad panic and keypad auxiliary 2 are enabled.

Programming the NX-4 control panel via LCD keypad

ENTERING THE PROGRAM MODE

To enter the program mode, press [*]-[8]. The LCD screen will now prompt you for the programming code. Next, enter the “Go To Program Code” (FACTORY DEFAULT IS 9713). If the “Go To Program Code” is valid, the LCD screen will prompt you for the device address you wish to program. You are now in the program mode, ready to select the module to be programmed.

Note: it is impossible to enter program mode if the system is armed.

SELECTING THE MODULE TO PROGRAM

Since all the modules connected to the NX-4 are programmed through the keypad, the module you are programming should be the first entry. To program the NX-4 Control Panel, enter [0]-[#]. The [0] is the module number of the control panel and the [#] is the entry key. Other module entry numbers can be found in the corresponding manuals.

PROGRAMMING A LOCATION

Once you have entered the number of the module to be programmed, the LCD screen will prompt you for a location number. Any location can be accessed by directly entering the desired programming location, followed by the crosshatch (pound) [#] key. If the location you enter is valid, the top line of the LCD screen will display the location number on the left and the segment number on the right. The bottom line of the display will show the current data. This data will be displayed and entered according to the type of data used (numerical, binary, or character data). Follow the instructions below for each type of data.

NUMERICAL DATA: The top line of the display will show the current location number on the left and the segment number on the right. The data will be displayed on the bottom line. The hex equivalent will be shown in parenthesis. To change the data in the current location, enter the number followed by [*]. The data will be entered and the segment will be incremented by 1. The data for this segment will now be displayed. Continue this process until the last segment is programmed. When you reach the last segment, the keypad will prompt you for the next location. If you wish to exit this location before the last segment is reached, press the [#] key. This keypress will not save the changes made to current segment, but it will exit the location. To proceed to the next location, press the [Police] key. To return to the previous location, press the [Fire] key. To re-enter the last location, press the [Medic] key.

BINARY DATA: The top line of the display will show the current location number on the left and the segment number on the right. The data will be displayed on the bottom line with the numbers 1-8 in the first 8 characters. If the number appears, this binary switch is on. If minuses sign (-) appears where the number should be, this switch is off. Toggle the numbers on or off, using the corresponding number digit (1 to toggle 1, 8 to toggle 8). When the numbers are in the desired state, press the [*] key. The data will be entered and the segment will be incremented by 1. The data for this segment will now be displayed. Continue this process until the last segment is programmed. When you reach the last segment, the keypad will prompt you for the next location. If you wish to exit this location before the last segment is reached, press the [#] key. This keypress will not save the changes made to current segment, but will exit the location. To proceed to the next location, press the [Police] key. To return to the previous location, press the [Fire] key. To re-enter the last location, press the [Medic] key.

CHARACTER DATA: Character data is used to enter LCD text when programming (see [*]-[9]-[2] feature for custom messages). Custom zone descriptions and messages are stored using character or ASCII data types. This information is programmed using the bottom line of the display as a text editor. Once a character location has been entered, the current data will be displayed on the bottom line. As always, the top line will display the current location and segment number. The five (5) function keys, as well as the 'up' and 'down' arrows to the right of the display, are now used to edit the message before saving it back to the location storage. An underscore (_) in the display indicates the current cursor location. To move the cursor to the right, press the [*] key. To move the cursor to the left, press the **[Cancel] key**. To change the character at the current cursor location, press the **Up** or **Down Arrow** until the desired character is displayed. To accept this character, press the [*] key. The character will remain, and the cursor will advance one space to the right.

You can also immediately select a character from the underlying table. By doing this you can quickly form a word without having to scroll down all characters in the list

Follow the procedure below to select a character:

Step 1	Enter the double figured number of the wanted character of the table below.
Step 2	Confirm the character by pressing the [*] key.
Step 3	Repeat steps 1 and 2 until the complete word is formed.
Step 4	Confirm the word by pressing the [#] key.

Key	Function
[Stay]	Inserting spaces
[Chime]	Deleting characters
[Exit]	Access the library
[Bypass]	Make a character or entire word flashing
[*]	Confirm the word or character being displayed
[#]	Finished editing the line

NX-148 LIBRARY

ALARM	DURESS	INSTANT	PIR	STORAGE
AREA	EAST	INTERIOR	PORCH	STUDY
AUDIO	EMERGENCY	JUNK	ROOM	TAMPER
BACK	EXIT	KITCHEN	RUMPUS	TELEVISION
BATHROOM	EXTERIOR	LIBRARY	SAFE	TROUBLE
BEAM	FIRE	LIGHT	SENSOR	TV
BEDROOM	FRONT	LIVING	SHOCK	UP
BUTTON	GAME	MASTER	SHOP	UTILITY
CEILING	GARAGE	MICROWAVE	SIDE	VAULT
CLOSET	GLASSBREAK	MOTION	SKYLIGHT	WAREHOUSE
DELAY	GUEST	NORTH	SLIDING	WEST
DEN	HALL	NURSERY	SMALL	WINDOW
DETECTOR	HEAT	OFFICE	SMOKE	WING
DINING	HOLDUP	PANIC	SOUND	WIRELESS
DOOR	HOUSE	PANTRY	SOUTH	YARD
DOWN	INFRARED	PHONE	STAIRS	ZONE

ALPHANUMERIC CHARACTER TABEL

1	A	20	T	39	ä	58	n	77	#
2	B	21	U	40	ä	59	o	78	$
3	C	22	V	41	b	60	ô	79	&
4	D	23	W	42	c	61	ö	80	'
5	E	24	X	43	ç	62	p	81	(
6	F	25	Y	44	d	63	q	82	)
7	G	26	Z	45	e	64	r	83	*
8	H	27	0	46	é	65	s	84	+
9	I	28	1	47	è	66	t	85	,
10	J	29	2	48	ê	67	u	86	-
11	K	30	3	49	f	68	û	87	.
12	L	31	4	50	g	69	ü	88	/
13	M	32	5	51	h	70	v	89	:
14	N	33	6	52	i	71	w	90	;
15	O	34	7	53	î	72	x	91	<
16	P	35	8	54	j	73	y	92	=
17	Q	36	9	55	k	74	z	93	>
18	R	37	a	56	l	75	!	94	_
19	S	38	à	57	m	76	”	95	°

EXITING THE PROGRAM MODE

When you have made all the desired changes in programming, it is time to exit the program mode. Press the [Exit] key to exit this programming level, and go to the “Select a Module To Program” level. If no additional modules are to be programmed, press the [Exit] key again to exit the program mode. If there is a module to be programmed, you can select it by entering its address, followed by the [#] key (see “Selecting the Module To Program” above). The procedure for programming these devices is the same as for the control panel, except that the locations will be for the module selected.

Note: the timeout for the program mode is 15 minutes.

LOADING FACTORY DEFAULTS

To load the factory defaults, enter the program mode using the above procedure, then type [9]-[1]-[0]-[#]. The keypad will beep 3 times to show that loading is in progress. The loading takes about 6 seconds.

ENROLLING MODULES AND KEYPADS

For supervision purposes, the presence of all keypads, zone expanders, wireless receivers, and any other modules connected to the data terminal can automatically be found and stored in the NX-4’s memory. This allows the control panel to supervise these modules. Note: All modules should be connected and set to unique addresses before modules are enrolled. To enroll the modules, enter the program mode of the NX-4 control panel as described above. If necessary, go on to program the rest of the control panel and devices. When you exit from program mode, the control panel will automatically enroll the devices. The enrolling process takes about 12 seconds, during which time the “Service Screen” will be displayed. If a module has been enrolled but it is not detected by the control, the “Service Screen” will be displayed.

IMPORTANT REMARKS

Tamper memorization

Tamper alarm indications (zone tampers and box tampers) can only be erased by entering the program mode. This means that tamper alarm indications can only be reset by the installer.

Disabling tamper alarms in program mode

Tamper alarms (originating from zones and boxes) will be disabled during program mode. This allows the installer to service the system without generating unwanted tamper alarms.

Keypad tamper lockout

When this option is enabled (see location 23, segment 1), the NX-4 will disable the keypad for 60 seconds, and will communicate a tamper signal to the central station if 30 keypresses are entered without producing a valid code.

CONTROL PANEL PROGRAMMING LOCATIONS

☞ For most routine installations, the "Quick Start" option will allow for enabling a majority of the options available with the NX-4, when communicating in Contact ID or SIA formats and without partitioning. The "Quick Start" locations can be identified by the ☞ symbol.

Telephone number 1

☞ LOCATION 0 - PHONE N° 1 (20 segments, numerical data)

The first telephone number is programmed in location 0. A "14" indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a "13" in the appropriate segment. The system will always wait for a dial tone, unless the first digit of the phone number is a "13"; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a "15" in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a "15" in the first segment. Program an "11" for a "*", and a "12" for a "#".

Note: a zero is programmed as a "0".

☞ LOCATION 1 - ACCOUNT CODE FOR PHONE N° 1 (6 segments, numerical data)

Location 1 is used to program the account code that is sent when phone N°1 is dialled. A zero in the account code is programmed as a "0". A "10" indicates the end of the account code, so program a "10" in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments.

☞ LOCATION 2 - COMMUNICATOR FORMAT FOR PHONE N° 1 (1 segment, numerical data)

Location 2 contains the communicator format used to transmit to the receiver that is connected to phone N°1. Consult the instructions for your central station receiver to determine which format is compatible. Select a format from the list on the following page. If you require a format other than those listed, review the override options described in location 18 in order to create the appropriate format. In order to create a special format, a "15" must be programmed in location 2 in addition to the entries in location 18. If this location contains a "0", the built-in communicator will be disabled, and the NX-4 will function as a 'local only' control.

☞ LOCATION 3 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 1 (2 segm., numerical data)

Segment 1- Dial attempts: Location 3, segment 1 is used to enter the number of dial attempts (1 to 15) which the communicator will make to phone N°1 before it ends the notification process. Factory default is "8" and the communicator will make 8 attempts to the first number.

There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt.

Segment 2- Phone N° 1 backup control: Programming a “0” in segment 2 of this location will cause the NX-4 to make the designated number of attempts to phone N°2 before setting the “Fail To Communicate” condition and stop reporting. Programming a “1” in this segment will cause the NX-4 to stop trying to communicate after the designated number of attempts have been made to phone N°1. If a “2” is programmed in this segment, it will cause the NX-4 to make the dial attempts in increments of two. The first two attempts will be made to phone N°1, the next two attempts to phone N°2, then repeating until the total number of attempts designated in segment 1 is completed.

Format selections

DATA	FORMAT	DESCRIPTION
0	Local	Communicator is disabled
1	Ademco Contact ID	DTMF format (see appendix 1-2)
2	Ademco 4/2 Express	DTMF format
3	Semadigit pager format	Pager format (Not possible for Sweden and Norway)
4	Reserved	
5	Siren Tone Format	Siren sound, for domestic dialling *
6	Reserved	
7	SIA (level 1, supporting level 2 area modifier and level 3 listen-in block) or Robofon format	FSK format (see appendix 1-2). Robofon format: only for Sweden and Norway.
8	Buzzer mode pager	Pager format (for Holland)
9	Radionics extended fast with parity	Extended event code 1800hz transmit 2300hz handshake single round w/parity 40 PPS extended hex capability
10	Reserved	
11	Ademco/ Silent Knight Slow	1900hz transmit 1400hz handshake 10 PPS double round parity
12	Silent Knight 4+2 fast	Two-digit event code 1900hz transmit 1400hz handshake 20 PPS double round parity
13	Sescoa/Franklin Fast	1800hz transmit 2300hz handshake 20 PPS hex double round
14	SIA (level 1, supporting level 3 listen-in block)	FSK format (see appendix 1-2)
15	Custom format	(See location 18)

Remark (*):

The siren tone format (format 5) can be kissed off by pressing the “*” key on the telephone set (persistent tone of 250 msec. is required).

If you want to trigger a “kiss-off” signal via a GSM, you have to take into account that this function is Network provider dependent.

Reporting events to phone number 1

Phone N°1 has one programming location that is used to select the events which are reported to this phone number.

Location 4 is used to select which events are reported to phone N°1. If you do not want dual or split reporting, use location 4 to select all events to phone N°1. If you want dual or split reporting, and the split is based on the event type (such as alarm, open/close, etc.), you should use location 4 to select only those events that should be reported to phone N°1. If no events are to be reported to phone N°1, location 4 should be programmed as “0”. Location 5 is not used and therefore it must be left empty.

LOCATION 4 - EVENTS REPORTED TO PHONE N° 1 (2 segments, feature selection data)

Segment 1

1 = Alarms (for Norway / Sweden: also restores)
2 = Opening and closings
3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore), and low battery bestore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2

1 = Zone and box tamper
2 = Auxiliary power over-current, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore (for Norway / Sweden: reserved)
8 = Tamper restore (for Norway / Sweden: reserved)

LOCATION 5 - Reserved

Telephone number 2

LOCATION 6 - PROGRAMMING PHONE N° 2 (20 segments, numerical data)

Phone N°2 is programmed in location 6. A “14” indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a “13” in the appropriate segment. The system will always wait for a dial tone unless the first digit of the phone number is a “13”; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a “15” in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a “15” in the first segment. Program an “11” for a “*”, and a “12” for a “#”.

Note: a zero is programmed as a “0”.

LOCATION 7 - ACCOUNT CODE FOR PHONE N° 2 (6 segments of numerical data)

Use location 7 to program the account code that is sent when phone N°2 is dialled. A zero in the account code is programmed as a “0”. A “10” indicates the end of the account code, so program a “10” in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments. If this location is left unprogrammed, account code 1 will be used when the second phone number is dialled.

LOCATION 8 - COMMUNICATOR FORMAT FOR PHONE N° 2 (1 segment, numerical data)

Location 8 contains the communicator format used to transmit to the receiver that is connected to phone N°2. Consult the instruction manual for your central station receiver in order to determine which format is compatible, and select from the 15 formats listed on page 32. If you require a format other than those listed, review the override options described in Location 18 to create the appropriate format. In order to create a special format, a “15” must be programmed in location 8, in addition to the entries in location 18. If this location contains a “0”, format 1 will be used when phone N°2 is dialled.

LOCATION 9 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 2 (2 segments, numerical data)

Segment 1, dial attempts: segment 1 of location 9 is used to enter the number of dial attempts (1 to 15 attempts) that the communicator will make to phone N°2 before it ends the notification process. Factory default is “0”, and the communicator will make the same number of attempts as those programmed in location 3.

There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt (regardless of the number dialled).

Segment 2, phone N° 2 backup control: Programming a “0” in segment 2 of this location will cause the NX-4 to make the designated number of attempts to phone N°1 before setting the “fail to communicate” condition and stop reporting. Programming a “1” in this segment will cause the NX-4 to stop trying to communicate after the designated number of attempts have been made to phone N°2. If a “2” is programmed in this segment, it will cause the NX-4 to make the dial attempts in increments of two. The first two attempts will be made to phone N°2, the next two attempts to phone N°1, then repeating until the total number of attempts designated in segment 1 is completed.

Reporting events to phone number 2

Phone N°2 can be used to back up phone N°1, or as a second receiver to multi-report or split-report events. Phone N°2 has one programming location that is used to select the events that are reported to this phone number. Location 10 is used to select the events which are reported to phone N°2. If you do not want dual or split reporting, location 10 should be left at the factory default of “0”. If you want multi-reporting or split reporting, and the split is based on the event type (such as alarm, open close etc.), location 10 should be used to select only those events that should be reported to phone N°2. If no events are to be reported to phone N°2, location 10 should be at “0”. Location 11 is not used and therefore it must be left empty.

LOCATION 10 - EVENTS REPORTED TO PHONE N° 2 (2 segments of feature selection data)

Segment 1

1 = Alarms (for Norway / Sweden : also restores)
2 = Opening and closings
3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore) , and low battery restore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2

1 = Zone and box tamper
2 = Auxiliary power overcurrent, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore (for Norway / Sweden: reserved)
8 = Tamper restore (for Norway / Sweden: reserved)

LOCATION 11 - Reserved

LOCATION 12 - PROGRAMMING PHONE N° 3 (20 segments, numerical data)

Phone N°3 is programmed in location 12. A “14” indicates the end of the phone number. Delays of four seconds can be programmed at any point in the phone number by programming a “13” in the appropriate segment. The system will always wait for a dial tone unless the first digit of the phone number is a “13”; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a “15” in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a “15” in the first segment. Program an “11” for a “*”, and a “12” for a “#”.

Note: a zero is programmed as a “0”.

LOCATION 13 - ACCOUNT CODE FOR PHONE N° 3 (6 segments, numerical data)

Use location 13 to program the account code that is sent when phone N°3 is dialled. A zero in the account code is programmed as a “0”. A “10” indicates the end of the account code, so program a “10” in the segment immediately after the last digit of the account code. If the account code is 6 digits long, program all 6 segments. If location 6 is left un-programmed, account code 1 will be used when phone N°3 is dialled.

LOCATION 14 - COMMUNICATOR FORMAT FOR PHONE N° 3 (1 segment, numerical data)

Location 14 contains the communicator format used to transmit to the receiver that is connected to phone N°3. Consult the instruction manual for your central station receiver in order to determine which format is compatible, and select from the 15 formats listed on page 32. If you require a format other than those listed, review the override options described in location 18 to create the appropriate format. In order to create a special format, a “15” must be programmed in location 14, in addition to the entries in location 18. If this location contains a “0”, format 1 will be used when phone N°3 is dialled.

LOCATION 15 - DIAL ATTEMPTS/BACKUP CONTROL FOR PHONE N° 3 (2 segments, numerical data)

Segment 1, Dial Attempts: Segment 1 of location 15 is used to enter the number of dial attempts (1 to 15) that the communicator will make to phone N°3 before it ends the notification process. Factory default is “0”, and the communicator will make the same number of attempts as those programmed in location 3.

There will be a waiting time of 12 seconds between the first two dial attempts, and a waiting time of 60 seconds between each subsequent dial attempt (regardless of the number dialled).

Segment 2, Phone # 3 Backup Control: Programming a “0” in segment 2 of this location will cause the NX-4 to make the designated number of attempts to phone N°2 before setting the “Fail To Communicate” condition and stop reporting. Programming a “1” in this segment will cause the NX-4 to stop trying to communicate after the designated number of attempts have been made to phone N°3. If a “2” is programmed in this segment, it will cause the NX-4 to make the dial attempts in increments of two. The first two attempts will be made to phone N°3, the next two attempts to phone N°2, then repeating until the total number of attempts designated in segment 1 is completed.

Reporting events to phone number 3

Phone N°3 can be used as a third receiver to multi-report or split report events. Phone N°3 has one programming location that is used to select the events that are reported to this phone number. Location 16 is used to select which events are reported to phone N°3. If you do not want dual or split reporting, location 16 should be left at the factory default of “0”. If you want multi-reporting or split reporting, and the split is based on the event type (such as alarm, open/close, etc.), then location 16 should be used to select only those events that should be reported to phone N°3. If no events are to be reported to phone N°3, location 16 should be at “0”. Location 17 is not used and therefore it must be left empty.

LOCATION 16 - EVENTS REPORTED TO PHONE N° 3 (2 segments, feature selection data)

Segment 1

1 = Alarms (for Norway / Sweden : also restores)
2 = Opening and closings
3 = Zone bypass and bypass restores
4 = Zone trouble and trouble restores
5 = Power fail (AC failure), low battery, power restore (AC restore) , and low battery restore
6 = Bell cut, bell cut restore, telephone line restore
7 = Test reports
8 = Start and end programming, download complete and log full

Segment 2

1 = Zone and box tamper
2 = Auxiliary power overcurrent, and restore
3 = Wireless sensor missing and restore
4 = Wireless sensor low battery and restore
5 = Expander trouble and restore (keypads are considered as expanders)
6 = Fail to communicate
7 = Alarm restore (for Norway / Sweden: reserved)
8 = Tamper restore (for Norway / Sweden: reserved)

LOCATION 17 - Reserved

Special formats

LOCATION 18 - CUSTOM COMMUNICATOR FORMAT (see locations 2, 8, and 14)

Segment 1

1 = On for 1800hz transmit; Off for 1900hz
2 = On for 2300hz handshake; Off for 1400hz
3 = On for checksum parity; Off for double round parity
4 = On for 2 digit event code; Off for 1 digit event code
5 = On for extended reporting; Off for non-extended reporting
6 = Reserved
7 = On for 20 PPS; Off for 10 or 40 PPS
8 = On for 10 PPS; Off for 20 or 40 PPS

Segment 2

1 = On for pager format (no handshake required).
2 = On for 1400/2300 handshake
3 = Reserved
4 = Reserved
5 = On for Contact ID
6 = On for SIA
7 = On for 3 digit event code
8 = On for DTMF

Segment 3 Reserved

Segment 4 Inter-digit time for pulse format:

The inter-digit time is the value programmed on this location, divided by the pulse-rate (PPS) of the programmed format. This is programmed in a binary way: in order to program the value “10”, options 2 and 4 must be selected, for value “5”, options 1 and 3 must be selected.

Ex: when the value 10 is programmed on segment 4 and a pulse format of 20 PPS is used, the inter-digit time is 10/20 = 0.5 sec.

Download parameters

☞ LOCATION 19 - DOWNLOAD ACCESS CODE (8 segments, numerical data)

Location 19 contains the eight-digit access code that the NX-4 must receive from the downloading software before the panel will allow downloading. The factory default code is 84800000.

☞ LOCATION 20 - NUMBER OF RINGS TO ANSWER (1 segment, numerical data)

Location 20 contains the number of rings to answer for a download. Enter a number from “0” (disabled) to “15”. Factory default is “8”, so the NX-4 will answer after 8 rings.

LOCATION 21 - DOWNLOAD CONTROL (1 segment, feature selection data)

Location 21 contains the feature selections to control download sessions. The following features can be enabled or disabled using this location (see the feature definitions on pages 5-11).

Segment 1

1 = On: enables two call answering machine defeat
2 = Reserved
3 = On: requires call-back before download session
4 = Shutdown (can only be viewed from the keypad; must be changed by downloading)
5 = On: locks all local programming. (can only be viewed from the keypad; must be changed by downloading)
6 = On: locks programming of all locations associated with the communicator (can only be viewed from the keypad; must be changed by downloading)
7 = On: locks out download section. (If “On”, locations 19 - 22 cannot be viewed from the keypad; can only be viewed from the keypad when “Off”)
8 = On: enables call-back at auto test interval

LOCATION 22 - DOWNLOAD CALL BACK NUMBER (20 segments, numerical data)

If a telephone number is programmed into this location, and “Require Call-back” is enabled in location 21, the control panel will hang up for approximately 36 seconds (ensuring that the calling party has disconnected), and then call back. The system will always wait for a dial tone unless the first digit of the phone number is a “13”; in this case, it will only delay. Tone (DTMF) dialling is default. If you want pulse tone dialling, program a “15” in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program a “15” in the first segment. Four-second delays can be obtained anywhere in the sequence by programming a “13” in the appropriate delay location.

Note: a zero is programmed as a “0”.

WARNING: YOU SHOULD ALWAYS CHECK THAT THE CALLBACK PHONE NUMBER IS ACCURATE BEFORE DISCONNECTING.

Feature and report selections

☞ LOCATION 23 - FEATURE AND REPORT SELECTIONS (3 segments, feature selection data)

Location 23 is used to enable certain features that the user can access or see from the keypad of the system. In addition, certain communicator reports are enabled in location 23.

This location contains 3 segments of 8 features each (see the feature definitions).

Segment 1

1 = On: enables the quick arm feature (for exit and stay mode)
2 = On: enables the re-exit feature
3 = On: enables the automatic bypass feature (of interior zones)
4 = On: enables the silent keypad panic feature (overrides the audible panic selection)
5 = On: enables the audible keypad panic feature
6 = On: enables the keypad Aux 1 feature (FIRE)
7 = On: enables the keypad Aux 2 feature (MEDICAL)
8 = On: enables the keypad multiple code attempt tamper feature (keypad lockout)

Segment 2

1 = On: enables the LED extinguish feature
2 = On: enables the require code for bypassing feature
3 = On: enables the zone bypassed sounder alert feature
4 = On: enables the AC power/low battery sounder alert feature
5 = On: enables bypass toggle
6 = On: enables silent auto arm
7 = On: enables the automatic instant feature (of entry/exit zones)
8 = On: enables final set door

Segment 3

1 = On: enables opening and closing reports
2 = On: enables zone bypass reporting
3 = On: enables zone restore reporting
4 = On: enables zone trouble reporting
5 = On: enables zone tamper reporting
6 = On: enables the cancel reporting
7 = On: enables the recent closing report
8 = On: enables the exit error report

Entry/Exit timers

☞ **LOCATION 24 - ENTRY / EXIT TIMERS (4 segments, numerical data)**

Location 24 is used to program the entry/exit times. There are 2 separate entry/exit times.

Segment 1	Entry time 1	This is the entry time that will be used when a delay 1 zone type initiates an entry delay. Valid entries are 10-255 seconds.
Segment 2	Entry time 2	This is the exit time that will be used for all zones designated as delay 1. Valid entries are 10-255 seconds.
Segment 3	Entry time 3	This is the entry time that will be used when a delay 2 zone type initiates an entry delay. Valid entries are 10-255 seconds.
Segment 4	Entry time 4	This is the exit time that will be used for all zones designated as delay 2. Valid entries are 10-255 seconds.

Zone configurations

DEFAULT ZONE CONFIGURATIONS

Zones can be programmed to be one of twenty different zone configurations (zone types). The default zone configurations are listed below. Programming locations 110-149 can customise all zone configurations.

DATA	R conf.	DESCRIPTION OF DEFAULT CONFIGURATION
1	2	**DAY ZONE** Instant when system is armed; trouble zone when system is disarmed. A day zone will only work if programmed for single end-of-line resistor.
2	2	**24 HOUR AUDIBLE** Creates an instant yelping siren alarm regardless of the arming state of the control panel. This zone type is not abortable. This zone can be bypassed.
3	2	**ENTRY/EXIT DELAY 1** A trip will start entry delay 1. Absence of a trip during the exit delay will enable the automatic bypass or instant mode, if so programmed.
4	2	**FOLLOWER (WITH AUTO- BYPASS DISABLED)** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry and exit delay times. This zone will not bypass automatically, even if enabled in segment 1 of location 23.
5	2	**INTERIOR FOLLOWER (WITH AUTO- BYPASS ENABLED)** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. This zone will bypass automatically, if enabled in segment 1 of location 23.
6	2	**INSTANT** This zone creates an instant alarm whenever it is tripped and the armed LED is on.
7	2	**24 HOUR SILENT** Creates an instant silent alarm regardless of the arming state of the control panel. It will not display on the keypad. This zone is not abortable, but can be bypassed.
8	1	**FIRE** This zone will light up the fire LED and sound the steady siren each time the zone is shorted. It will also rapidly flash the fire LED, indicating trouble if the zone is open. This zone cannot be bypassed.
9	2	**ENTRY/EXIT DELAY 2** A trip will start entry delay 2. Absence of a trip during the exit delay will enable the automatic bypass or instant mode, if so programmed.
10	1	**24 HOUR AUDIBLE SUPERVISED** Creates an instant audible alarm, regardless of the arming state of the control panel. It will display on the keypad (e.g. flashing zone LED's, and changed READY LED). This zone is not abortable and cannot be bypassed.
11	2	**MOMENTARY KEYSWITCH ZONE** This zone type will allow to arm and disarm the system, every time the zone is shorted. Keyswitch arming will report as user #99.

12	2	**INTERIOR FOLLOWER WITH "CROSS ZONE" ENABLED** This zone will be instant when the system is armed and no entry or exit delay is being timed. It is delayed during entry and exit delay times. If a "Cross Zone" is not being timed, it will start a "Cross Zone" timer. If a "Cross Zone" is being timed, it will create an instant alarm. This zone will bypass automatically, when enabled in segment 1 of location 23.
13	2	**INSTANT ENTRY GUARD** This zone creates an instant alarm whenever it is tripped and the stay/instant LED is off. It will start an entry delay time 1 if it is tripped, provided that the system is armed and the stay/instant LED is on.
14	2	**ENTRY/EXIT DELAY 1 WITH GROUP BYPASS ENABLED** A trip will start entry delay 1. This zone will bypass when the "Group Bypass" command is entered at the keypad. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed.
15	2	**INTERIOR FOLLOWER WITH GROUP BYPASS ENABLED** This zone will be instant when the system is armed and no entry or exit delays are being timed. It is delayed during entry/exit delay times. This zone will bypass when the "Group Bypass" command is entered at the keypad. This zone will bypass automatically, if enabled in segment 1 of location 23.
16	2	**INSTANT WITH GROUP BYPASS ENABLED** This zone creates an instant alarm whenever it is tripped and the armed LED is on. This zone will bypass when the "Group Bypass" command is entered at the keypad
17	2	**MAINTAINED KEYSWITCH** This zone type will allow to arm the system, as long as the zone is shorted. Keyswitch arming will report as user #99.
18	2	**ENTRY/EXIT DELAY 1 FORCE ARMABLE** A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable (see feature definitions pages 5-11).
19	2	**ENTRY/EXIT DELAY 2 FORCE ARMABLE** A trip will start entry delay 2. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. This zone is force armable (see feature definitions, pages 5-11).
20	2	**ENTRY/EXIT DELAY 1 WITH CHIME ENABLED** A trip will start entry delay 1. Absence of a trip during exit delay will enable the automatic bypass or instant mode, if so programmed. When the control panel is disarmed and the chime mode has been set, this zone will act as a chime zone.

Note: all zone configurations are programmed for double end of line resistor configuration, except for FIRE and 24H AUDIBLE SUPERVISED.

☞ **LOCATION 25 - ZONES 1-8 CONFIGURATION GROUP (8 segments, numerical data)**

Location 25 contains the configuration group (Zone type) for zones 1-8. Segment 1 is for zone 1, and segment 8 is for zone 8. You will find the default configurations in the table above.

LOCATION 26-36 - RESERVED

General options

LOCATION 37 - SIREN AND SYSTEM SUPERVISION (5 segments, feature selection data)

Location 37 is used to enable various system feature and reporting options (see the feature definitions on pages 5-11).

Segment 1

1 = Reserved
2 = Reserved
3 = On: if siren blast at arming (pulse)
4 = On: if siren blast at exit expiration (pulse)
5 = On: if siren blast at closing kiss-off (pulse)
6 = On: if siren sounds during a “Cross Zone” verification time
7 = On: if siren sounds for a zone or box Tamper
8 = On: if siren blasts 1 time for keyswitch or wireless arming; 2 times for disarming

Segment 2

1 = On: if siren driver should be a voltage output. Off: if on-board siren driver is enabled
2 = On: if sirens sound for expander trouble
3 = On: for zones to restore immediately. Off: for zones to restore only when the siren is off or disarmed
4 = On: if dynamic battery test is performed at arming. Off: if dynamic battery test is performed at disarming (See location 40)
5 = On: if sattery missing test is performed every 12 seconds
6 = On: if manual bell test is performed during [*]-[4]-[4] test function
7 = On: if manual communicator test is performed during [*]-[4]-[4] test function
8 = On: if box tamper terminals on the control panel are enabled

Segment 3

1 = On: if box tamper report is enabled
2 = On: if AC fail reporting is enabled
3 = On: if low battery reporting is enabled
4 = On: if Aux. power overcurrent report is enabled
5 = On: if siren supervision report is enabled
6 = Reserved
7 = On: if A + B alarm is enabled (only for Norway/Sweden)
8 = On: if expander trouble reporting is enabled

Segment 4

1 = On: if fail to communicate report is enabled
2 = On: if log full report is enabled
3 = On: if autotest report is enabled
4 = On: if start/end programming report is enabled
5 = On: if end download report is enabled
6 = On: if sensor low battery report is enabled
7 = On: if sensor missing report is enabled
8 = On: if autotest report is enabled ONLY when the system is armed

Segment 5
1 = On: enable lost clock service light
2 = Reserved
3 = On: disables on-board 4 zones
4 = On: will allow two trips on same cross-zone to activate an alarm
5 = On: will not allow zones that are force armed to report bypass
6 = On: enables silent exit option
7 = Reserved
8 = On: switch “summer/wintertime” and vice versa

LOCATION 38 - SWINGER SHUTDOWN COUNT

Location 38 contains the number of trips on a zone before that zone will be automatically bypassed. Refer to the feature definitions.

☞ LOCATION 39 - KEYPAD SOUNDER CONTROL (1 segment, feature selection data)

Segment 1
1 = Reserved
2 = Reserved
3 = On: if keypad sounds for an AC power failure
4 = On: if keypad sounds when a low battery is detected
5 = On: if keypad sounds during cross zone trip time
6 = On: if keypad sounds for zone and box tampers
7 = Reserved
8 = Expander trouble

LOCATION 40 - SYSTEM TIMERS (10 segments, numerical data)

Location 40 contains the duration of various system timing functions. Example: If you want the duration of the dynamic battery test to be 30 minutes, you should program [3]-[0]-[*] in segment 1 of this location. The [3]-[0] is the number of minutes; the [*] stores the data, and moves to the next segment of this location.

Segment 1 Dynamic battery test duration in minutes, 0-255 minutes (“0” = no test)
Segment 2 AC fail report delay in minutes, 0-255 minutes
Segment 3 Power up delay in seconds, 0-60 seconds (“0” = no power up delay)
Segment 4 Siren time in minutes, 1-255 minutes
Segment 5 Reserved
Segment 6 Cross zone time in seconds, 0-255 (“0” = no cross zoning)
Segment 7 Chime time in 50 msec. (1/ 20th second) increments from 0-12 seconds (“0” = follows zone 255 latched)
Segment 8 Dial delay in seconds, 0-255 seconds (0 no abort delay)
Segment 9 Fire alarm verification time in seconds, 120-255 seconds (“0” = no fire alarm verification). Values less than 120 sec. are considered as 120 sec.
Segment 10 Listen-in time in seconds, 0-255 (“ 0” = no listen-in time)

LOCATION 41 - CODE REQUIREMENTS (1 segment, feature data)

Segment 1

1 = On: enables the 6-digit code option. If 6-digit option is enabled, all arm/disarm codes and the "Go To Program Code" are 6 digits. If this option is enabled, the default user 1 code is [1]-[2]-[3]-[4]-[5]-[6]. NOTE: IF YOU ENABLE THIS OPTION, VERIFY THAT THE "GO TO PROGRAM CODE" IS A SIX-DIGIT CODE BEFORE YOU EXIT FROM PROGRAMMING

2 = On: requires code entry for [*]-[9]-[8] (perform callback download) and [*]-[9]-[9] (answer incoming call for download) functions

3-4 Reserved

5 = On: keypad shutdown mode

6 = On: user authorisation to enter program mode

7-8 Reserved

LOCATION 42 - GO TO PROGRAM CODE (6 segments, numerical data)

Location 42 contains the "Go To Program Code". This location contains a code with either 4 or 6 digits. If the 6-digit code option is enabled in Location 41, THIS CODE MUST CONTAIN SIX (6) DIGITS. If this option is not enabled in location 41, the last 2 segments (digits) will be ignored. With the NX-4 disarmed, the "Go To Program Code" can be used to enter the program mode.

LOCATION 43 - GO TO PROGRAM CODE PARTITION AND AUTHORIZATION (2 segments, feature selection data)

The "Go To Program Code" can be used as a standard arm/disarm code. When using the code to arm or disarm, the user ID is 255. (It is not possible to change this code in the run mode).

Segment 1

1 = Reserved

2 = On: enables "Go To Program Code" as an arm only code

3 = On: enables "Go To Program Code" as an arm only, after closing

4 = On: enables "Go To Program Code" as a master arm/disarm code (can change user codes)

5 = On: enables "Go To Program Code" as an arm/disarm code

6 = On: enables "Go To Program Code" to bypass zones

7 = On: enables "Go To Program Code" opening and closing reports

8 = Reserved

☞ **LOCATION 44 - DURESS CODE (6 segments, numerical data)**

Location 43 contains the "Duress" code. This location contains either 4 or 6 digits. If the 6-digit code option is enabled in location 41, THIS CODE MUST CONTAIN SIX (6) DIGITS. If the 6-digit option is not enabled in location 41, the last 2 digits will be ignored. If the duress code is programmed, it will work for all partitions.

Programming the outputs

LOCATION 45 – Reserved

LOCATION 46 - AUXILIARY OUTPUT 1-2 SPECIAL TIMING (2 segments, feature selection data)

Location 46 contains special timing feature activation for the 2 auxiliary outputs. Segment 1 corresponds to output 1, segment 2 corresponds to output 2.

Segment 1-2

1 = On: if output should be timed in minutes; Off: if timed in seconds
2 = On: if output should latch; Off: if output should be timed
3 = On: if output should stop timing when the code is entered; Off: if the output should continue to time when the code is entered
4 = On: if output should only activate between the closing and opening time in locations 52 and 53
5 = On: if output should only activate between the opening and closing time in locations 52 and 53
6 = On: if output should be inverted (0 volts going to 12 volts when activated)
7-8 Reserved

LOCATION 47 - AUXILIARY OUTPUT 1, EVENT AND TIME (2 segments, numerical data)

Segment 1 Use the chart below to select the event that will activate auxiliary output 1

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on the data programmed in segment 1, location 46). Programming a “0” makes the output follow the event

LOCATION 48 - AUXILIARY OUTPUT 2, EVENT AND TIME (2 segments, numerical data)

Segment 1 Use the chart below to select the event that will activate auxiliary output 2

Segment 2 Program the timing from 0-255 (minutes or seconds, depending on the data programmed in segment 2, location 46). Programming a “0” makes the output follow the event

LOCATION 49-50 - Reserved

AUXILIARY OUTPUT EVENT SELECTION

DATA	EVENT	DATA	EVENT
0✓	Burglary alarm	27	Chime
1✓	Fire alarm	28✓	Expander trouble
2✓	24 hour alarm	29	Dynamic battery test time
3✓	Trouble alarm	30	Open period
4	Tamper alarm	31	Closed period
5	Yelping siren	32	Listen-in
6	Steady siren	33	Line seizure
7	Any siren	34	Reserved
8	Any bypass	35	Fail to communicate
9	AC fail	36	Reserved
10	Low battery	37	Program mode
11✓	Duress	38	Download in process
12✓	Aux 1 keypad (fire alarm)	39	Reserved
13✓	Aux 2 keypad (medical alarm)	40	Short Ccrcuit (overcurrent on 12 Vdc)
14✓	Panic keypad	41	Box tamper
15	Keypad tamper	42	Siren tamper
16✓	Autotest	43	Any open
17	Alarm memory	44	Any short
18	Entry	45	Any fault (open/short on non-fire zone)
19	Exit	46✓	Any alarm
20	Entry or exit	47	Beeping keypad
21	Armed state	48✣✓	Code entry (see note below)
22	Disarmed state	49✷✓	Key FOB function 1 (wireless)
23	Ready	50✷✓	Key FOB function 2 (wireless)
24	Not ready	51	Autoarm time (last minute)
25	Fire	52	Siren when in away mode
26	Fire trouble	53	Reserved

Note :

- ✣ When event 48 is programmed, it is possible to program a user code authorisation to select the output(s), which a particular code will activate. When LED 8 is on for an authorisation, then LED's -24 will correspond to the code that activates outputs 1 - 2 respectively (see "Programming the LED Keypads").
- ✷ Events 49 and 50 require a NX-408-I wireless receiver to operate.
- ✓ If set to follow condition, these events will be 1 second.

Setup for auto-test, auto-arm and opening/closing times

LOCATION 51 - AUTOTEST CONTROL (4 segments, numerical data)

Segment 1	Program a “1” if the interval is to be in hours; program a “0” for days. Add a “2” to suppress the daily test or a “3” to suppress the hourly test if any report has been sent
Segment 2	Program the autotest interval from 1-255 hours/days
Segment 3	Program the autotest report hour in 24 hour format (if the interval is in hours, this segment Is ignored)
Segment 4	Program the autotest report time, number of minutes after the hour

LOCATION 52 - OPENING TIME (2 segments, numerical data)

Location 52 contains the time (in 24 hour format) when the NX-4 will enable the disarm capability for codes designated as ‘arm only after closing’. This time is only valid on those days programmed in location 54.

Note: Opening time must be earlier than closing time so that auto-arm, Aux. outputs, or code authorisation can function properly.

Segment 1	Program the hour of the opening time
Segment 2	Program the minutes after the hour of the opening time

LOCATION 53 - CLOSING TIME/AUTOMATIC ARMING TIME (2 segments, numerical data)

Location 53 contains the time (in 24 hour format) when the NX-4 will disable the disarm capability for codes designated as ‘arm only after closing’. This is also the time when the automatic arming sequence will begin (if this option is enabled in location 55).

Note: Opening time must be earlier than closing time so that auto-arm, Aux. outputs, or code authorisation can function properly.

Segment 1	Program the hour of the closing / auto arm time
Segment 2	Program the minutes after the hour of the closing / auto arm time

LOCATION 54 - DAYS OF THE WEEK "ARM ONLY AFTER CLOSE WINDOW" CODES FUNCTION IN PARTITIONS 1 THRU 8 (8 Segments, feature selection data)

Location 54 selects the days of the week the system is open. On these days, "arm only after close window" codes will be able to arm and disarm during "open window". On days not selected here, "arm only after close window" codes will not be able to disarm.

Note: If the system programmed to auto-arm (location 55), the NX-4 will try to arm every 45 minutes for the duration of the close period.

On days not selected here, "arm only after close window" codes will not disarm.

Segment 1	1 =	"Arm only after close window" will arm/disarm on Sunday
	2 =	"Arm only after close window" will arm/disarm on Monday
	3 =	"Arm only after close window" will arm/disarm on Tuesday
	4 =	"Arm only after close window" will arm/disarm on Wednesday
	5 =	"Arm only after close window" will arm/disarm on Thursday
	6 =	"Arm only after close window" will arm/disarm on Friday
	7 =	"Arm only after close window" will arm/disarm on Saturday
	8 =	Reserved

LOCATION 55 - DAYS OF THE WEEK FOR AUTO ARMING IN PARTITIONS 1 THRU 8 (8 Segments, feature selection data)

Location 55 selects the days on which each partition will auto-arm. If a zone is faulted when the panel tries to auto-arm, the zone will be bypassed. If the zone restores, it will be unbypassed and active in the system.

Segment 1	1 =	Auto Arming on Sunday
	2 =	Auto Arming on Monday
	3 =	Auto Arming on Tuesday
	4 =	Auto Arming on Wednesday
	5 =	Auto Arming on Thursday
	6 =	Auto Arming on Friday
	7 =	Auto Arming on Saturday
	8 =	Reserved

Communicator codes for slow speed formats only

LOCATIONS 56-83 ARE ONLY USED WHEN REPORTING EVENTS TO A PAGER, OR WHEN USING A SLOW FORMAT SUCH AS 4+2. WHEN USING CONTACT ID OR SIA, THERE IS NO NEED TO PROGRAM THESE LOCATIONS.

LOCATION 56 - ALARM/RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 56 contains the event code for any zone “Alarm” and “Restore” for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit of the alarm event code. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

This location contains 8 segments but only segment 1 and 5 are used.

Segment 1 contains the alarm code for zone 1 to 8.

Segment 5 contains the restore code for zone 1 to 8.

Segment 1	Zones 1-8, “Alarm Code”
Segment 2-4	Reserved
Segment 5	Zones 1-8, “Restore Code”
Segment 6-8	Reserved

LOCATION 57 - BYPASS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 57 contains the event code for a zone “Bypass” with a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

When unbypassing a zone, the restore code of location 56 will be used.

Segment 1	Zones 1-8, “Bypass Code”
Segment 2-8	Reserved

LOCATION 58 - TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS (8 segments, numerical data)

Location 58 contains the event code for a zone “Tamper” with a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

To report a restore, the restore code of location 56 will be used.

Segment 1	Zones 1-15, “Tamper Code”
Segment 2-8	Reserved

LOCATION 59 - TROUBLE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 59 contains the event code for a zone “Trouble” with a 4+2 and 3+1 format. For the 4+2 format, the digit programmed in this location will be sent as the tens digit. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

To report a restore, the restore code of location 56 will be used.

Segment 1	Zones 1-8, “Trouble Code”
Segment 2-8	Reserved

LOCATION 60 - SENSOR LOW BATTERY COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 60 contains the event code for a zone “Sensor Low Battery” for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

To report a restore, the restore code of location 56 will be used.

Segment 1	Zones 1-8, “Sensor Low battery Code”
Segment 2-8	Reserved

LOCATION 61 - SENSOR MISSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 61 contains the event code for a zone “Sensor-missing” for a 4+2 and 3+1 format. For a 4+2 format, the digit programmed in this location will be sent as the tens digit. As ones digit, the zone number (1-8) will be reported (e.g. zone 1 = 1, zone 8 = 8).

To report a restore, the restore code of location 56 will be used.

Segment 1	Zones 1-8, “Sensor Missing Code”
Segment 2-8	Reserved

LOCATION 62 - DURESS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 62 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the Duress code is enabled in location 44. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 63 - KEYPAD AUXILIARY 1 COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 63 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad “Auxiliary 1” (FIRE) is enabled in the partition feature selection. Segment 1 contains the tens digit; segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 64 - KEYPAD AUXILIARY 2 COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 64 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad “Auxiliary 2” (MEDICAL) is enabled in the partition feature selection. Segment 1 contains the tens digit; segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 65 - KEYPAD PANIC COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 65 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad “Panic” is enabled in the partition feature selection. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 66 - KEYPAD MULTIPLE CODE ENTRY TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 66 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the keypad “Multiple Code Entry” (Tamper) is enabled in the partition feature selection. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 67 - BOX TAMPER / BOX TAMPER RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 67 contains the tens and ones digits that will be sent for a 4+2 and 3+1 format if the “Box Tamper” feature is enabled in location 37. Segment 1 contains the tens digit of the “Box Tamper”. Segment 2 contains the ones digit of the “Box Tamper”. Segment 3 contains the tens digit of the “Box Tamper Restore”. Segment 4 contains the ones digit of the “Box Tamper Restore”.

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 68 - AC FAIL / AC FAIL RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 68 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if “AC Fail Reporting” is enabled. Segment 1 contains the tens digit of the “AC Fail Reporting”. Segment 2 contains the ones digit of the “AC Fail Reporting”. Segment 3 contains the tens digit of the “AC Fail Restore”. Segment 4 contains the ones digit of the “AC Fail Restore”.

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 69 - LOW BATTERY / LOW BATTERY RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 69 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Low Battery Reporting" is enabled. Segment 1 contains the tens digit of the "Low Battery Reporting". Segment 2 contains the ones digit of the "Low Battery Reporting". Segment 3 contains the tens digit of the "Low Battery Restore". Segment 4 contains the ones digit of the "Low Battery Restore".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 70 - AUX POWER OVERCURRENT/ AUX POWER OVERCURRENT RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 70 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Aux Power Overcurrent Reporting" is enabled. Segment 1 contains the tens digit of the "Aux Power Overcurrent Reporting". Segment 2 contains the ones digit of the "Aux Power Overcurrent Reporting". Segment 3 contains the tens digit of the "Aux Power Overcurrent Restore". Segment 4 contains the ones digit of the "Aux Power Overcurrent Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 71 - BELL TAMPER AND BELL TAMPER RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 71 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if siren supervision reporting is enabled. Segment 1 contains the tens digit of the "Bell Tamper Reporting". Segment 2 contains the ones digit of the "Bell Tamper Reporting". Segment 3 contains the tens digit of the "Bell Tamper Restore". Segment 4 contains the ones digit of the "Bell Tamper Restore".

For a 3+1 format, only the segment 1 resp. segment 3 digit (tens) will be sent.

LOCATION 72 - Reserved

LOCATION 73 - B-ALARM REPORT CODE (only for Norway/Sweden)

B-Alarm time is fixed at 30 minutes. The reporting of a B-Alarm is enabled if feature 7 is set on location 37, segment 3.

LOCATION 74 - EXPANDER TROUBLE AND EXPANDER TROUBLE RESTORE COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 74 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Expander Trouble Reporting" is enabled. Segment 1 contains the tens digit of the "Expander Trouble Reporting". Segment 2 contains the ones digit of the "Expander Trouble Reporting". Segment 3 contains the tens digit of the "Expander Trouble Restore". Segment 4 contains the ones digit of the "Expander Trouble Restore". For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 75 - FAIL TO COMMUNICATE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 75 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if the “Fail To Communicate Reporting” is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 76 - LOG FULL COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 76 contains the tens and ones digits for a 4+2 and 3+1 format if the “Log Full Reporting” is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 77 - OPENING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 77 contains the tens digit for a 4+2 and 3+1 format if “Opening Reporting” is enabled. For a 4+2 format, the digit programmed in this section will be sent as the tens digit of the alarm event code. As ones digit, the user number will be reported (e.g. code 1 = 1, code 8 = 8).

If you need to report openings and closings with a unique code per user, Contact ID or SIA format must be used.

Segment 1	Codes 1-8, “Opening Code”
Segment 2-8	Reserved

LOCATION 78 - CLOSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (8 segments, numerical data)

Location 78 contains the tens digit for a 4+2 and 3+1 format if “Closing Reporting” is enabled. For a 4+2 format, the digit programmed in this section will be sent as the tens digit of the alarm event code. As ones digit, the user number will be reported (e.g. code 1 = 1, code 8 = 8).

If you need to report openings and closings with a unique code per user, Contact ID or SIA format must be used.

Segment 1	Codes 1-15, “Closing Code”
Segment 2-8	Reserved

LOCATION 79 - AUTOTEST COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 79 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Autotest" or "Manual Test" is enabled. Segment 1 contains the tens digit, and segment 2 contains the ones digit.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 80 - RECENT CLOSING AND EXIT ERROR COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (2 segments, numerical data)

Location 80 contains the tens digit for a 4+2 and 3+1 format that will be sent if "Recent Closing" and/or "Exit Error Reporting" are enabled. Segment 1 contains the tens digit for the "Recent Closing Reporting". Segment 2 contains the digit for the "Exit Error Reporting". As ones digit, the user number (1-8) of the user who closed, will be sent.

If you need to report recent closings and exit errors with a unique code per user, Contact ID or SIA format must be used.

LOCATION 81 - START PROGRAM AND END PROGRAM COMMUNICATOR CODES, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 81 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "Start / End Programming Reporting" is enabled. Segment 1 contains the tens digit of the "Start Program Reporting". Segment 2 contains the ones digit of the "Start Program Reporting". Segment 3 contains the tens digit of the "End Program Reporting". Segment 4 contains the ones digit of the "End Program Reporting".

For a 3+1 format, only the segment 1 digit resp. segment 3 digit (tens) will be sent.

LOCATION 82 - END DOWNLOAD COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (4 segments, numerical data)

Location 82 contains the tens and ones digits for a 4+2 and 3+1 format that will be sent if "End Downloading Reporting" is enabled. Segment 1 and 2 are reserved. Segment 3 contains the tens digit of the "End Download Reporting". Segment 4 contains the ones digit of the "End Download Reporting". Note: A start download report will be sent to the internal event log.

For a 3+1 format, only the segment 1 digit (tens) will be sent.

LOCATION 83 - CANCEL COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY (1 segments, numerical data)

Location 83 contains the tens digit for a 4+2 and 3+1format that will be sent if “Cancel Reporting” is enabled. Segment 1 contains the tens digit for the “Cancel Communicator Reporting”. As ones digit, the user number (1-8) of the user who cancelled, will be sent.

If you need to report cancels with a unique code per user, Contact ID or SIA format must be used.

LOCATIONS 84-109 - RESERVED

Programming zone configuration groups

LOCATIONS 110-149 ARE USED TO CHANGE THE ZONE CONFIGURATIONS AS LISTED IN THE TABLE ON PAGES 44-45. THESE LOCATIONS ARE CONSIDERED AS ADVANCED PROGRAMMING, AND THEY SHOULD ONLY BE CHANGED IF YOU HAVE A THOROUGH UNDERSTANDING OF THE OPERATION OF EACH BIT.

Remark: All configuration groups can be customized via keypad programming and via downloading.

LOCATION 110 - CONFIGURATION GROUP 1 ALARM EVENT CODE (1 segment, numerical data)

Location 110 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 111 - CONFIGURATION GROUP 1 CHARACTERISTIC SELECT (3 segments, feature selection data)

Segment 1

1 = **Fire** (turn on if this is a fire zone)
2 = **24 hour** (turn on for non-fire 24 hour zones)
3 = **Keyswitch** zone (normally open switch)
4 = **Follower** (turn on for burglary zones that are Instant during non-entry times)
5 = **Delay 1** zone (follows timer 1 entry and exit times)
6 = **Delay 2** zone (follows timer 2 entry and exit times)
7 = **Interior** (turn on if this zone should automatically bypass or bypass for stay arming)
8 = **Local only** (turn on if this zone should not be reported)

Remark: for a maintained keyswitch (ON/OFF), program both "keyswitch" and "local"

Segment 2

1 = On: if configuration group will **beep the keypad** for alarm
2 = On: if configuration group will sound the **yelping siren** for alarm
3 = On: if configuration group will sound the **steady siren** for alarm
4 = On: if configuration group will **chime**
5 = On: if configuration group can be **bypassed**
6 = On: if configuration group is included in the **group shunt**
7 = On: if configuration group is **force armable**
8 = On: if configuration group is **entry guard**

Segment 3

1 = On: enables f**ast loop r**esponse. (50mS) – Off= 500mS
2 = On: enables double **end Of line tamper** zone. (Mainly used for tamper on wireless zones)
3 = On: enables t**rouble reporting** zone. (Day zone and fire zones)
4 = On: if configuration group is a c**ross zone**
5 = On: enables d**ialler delay** zone. (See location 40)
6 = On: if configuration group will use **swinger shutdown**. (See location 38)
7 = On: enables **restore reporting**
8 = On: enables l**isten-in**. (See location 40)

LOCATION 112 - CONFIGURATION GROUP 2 ALARM EVENT CODE (1 segment, numerical data)

Location 112 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 113 - CONFIGURATION GROUP 2 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 114 - CONFIGURATION GROUP 3 ALARM EVENT CODE (1 segment, numerical data)

Location 114 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 115 - CONFIGURATION GROUP 3 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 116 - CONFIGURATION GROUP 4 ALARM EVENT CODE (1 segment, numerical data)

Location 116 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 117 - CONFIGURATION GROUP 4 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 118 - CONFIGURATION GROUP 5 ALARM EVENT CODE (1 segment, numerical data)

Location 118 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 119 - CONFIGURATION GROUP 5 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 120 - CONFIGURATION GROUP 6 ALARM EVENT CODE (1 segment, numerical data)

Location 120 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 121 - CONFIGURATION GROUP 6 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 122 - CONFIGURATION GROUP 7 ALARM EVENT CODE (1 segment, numerical data)

Location 122 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on page 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 123 - CONFIGURATION GROUP 7 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 124 - CONFIGURATION GROUP 8 ALARM EVENT CODE (1 segment, numerical data)

Location 124 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 125 - CONFIGURATION GROUP 8 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 126 - CONFIGURATION GROUP 9 ALARM EVENT CODE (1 segment, numerical data)

Location 126 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 127 - CONFIGURATION GROUP 9 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 128 - CONFIGURATION GROUP 10 ALARM EVENT CODE (1 segment, numerical data)

Location 128 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 129 - CONFIGURATION GROUP 10 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 130 - CONFIGURATION GROUP 11 ALARM EVENT CODE (1 segment, numerical data)

Location 130 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 131 - CONFIGURATION GROUP 11 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 132 - CONFIGURATION GROUP 12 ALARM EVENT CODE (1 segment, numerical data)

Location 132 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 133 - CONFIGURATION GROUP 12 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 134 - CONFIGURATION GROUP 13 ALARM EVENT CODE (1 segment, numerical data)

Location 134 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 135 - CONFIGURATION GROUP 13 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 136 - CONFIGURATION GROUP 14 ALARM EVENT CODE (1 segment, numerical data)

Location 136 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 137 - CONFIGURATION GROUP 14 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 138 - CONFIGURATION GROUP 15 ALARM EVENT CODE (1 segment, numerical data)

Location 138 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 139 - CONFIGURATION GROUP 15 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 140 - CONFIGURATION GROUP 16 ALARM EVENT CODE (1 segment, numerical data)

Location 140 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 141 - CONFIGURATION GROUP 16 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 142 - CONFIGURATION GROUP 17 ALARM EVENT CODE (1 segment, numerical data)

Location 142 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 143 - CONFIGURATION GROUP 17 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 144 - CONFIGURATION GROUP 18 ALARM EVENT CODE (1 segment, numerical data)

Location 144 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 145 - CONFIGURATION GROUP 18 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 146 - CONFIGURATION GROUP 19 ALARM EVENT CODE (1 segment, numerical data)

Location 146 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 147 - CONFIGURATION GROUP 19 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

LOCATION 148 - CONFIGURATION GROUP 20 ALARM EVENT CODE (1 segment, numerical data)

Location 148 contains the event code that is sent for a Contact ID or SIA report. The desired event code should be chosen from the list on pages 80-81. The zone ID will be the zone that is in alarm.

This location is not used for slow speed formats (like 4+2 and 3+1). This location may also contain the alarm report code for the Robofon format (value 00-99).

LOCATION 149 - CONFIGURATION GROUP 20 CHARACTERISTIC SELECT (3 segments, feature selection data)

Use the “Configuration Group Characteristic Selections” described in Location 111.

NX-4 PROGRAMMING WORKSHEETS

(Factory defaults for segments are in ***bold italic*** text)

LOC	PG	DESCRIPTION	DEFAULT	PROGRAMMING DATA
0	31	PHONE 1	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
1	31	PHONE 1, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***	
2	31	PHONE 1, REPORTING FORMAT	***0***	
3	31	PHONE 1, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	
4	33	PHONE 1, SELECTING EVENTS TO REPORT TO PHONE 1		

Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
1	***Alarms (for Norway/Sweden: also Rest.***	1	***Tampers (zones and box)***
2	***Open/close***	2	***Short circuit***
3	***Bypass***	3	***Sensor lost***
4	***Zone trouble***	4	***Sensor low battery***
5	***Power trouble (AC failure or low battery)***	5	***Expander trouble (incl. keypad)***
6	***Siren & telephone fault***	6	***Failure to communicate***
7	***Test reports***	7	***Alarm restore (Norway/Sweden: Reserved)***
8	***Program, download, & log full***	8	***Tamper restore (Norway/Sweden: Reserved)***

5	33	Reserved	
6	34	PHONE 2	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***
7	34	PHONE 2, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***
8	34	PHONE 2, REPORTING FORMAT	***0***
9	34	PHONE 2, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***
10	35	PHONE 2, SELECTING EVENTS TO REPORT TO PHONE 2	

Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
1	Alarms (for Norway/Sweden: also restores	1	Tampers (zones and box)
2	Open/close	2	Short circuit
3	Bypass	3	Sensor lost
4	Zone trouble	4	Sensor low battery
5	Power trouble (AC failure or low battery)	5	Expander trouble (incl. keypad)
6	Siren & telephone fault	6	Failure to communicate
7	Test reports	7	Alarm restore (Norway/Sweden: Reserved)
8	Program, download, & log full	8	Tamper restore (Norway/Sweden: Reserved)

11	35	Reserved	

12	36	PHONE 3	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	
13	36	PHONE 3, ACCOUNT CODE	***10 – 10 – 10 – 10 – 10 – 10***	
14	36	PHONE 3, REPORTING FORMAT	***0***	
15	36	PHONE 3, DIAL ATTEMPTS BACKUP CONTROL	***8*** ***0***	

16	37	PHONE 3, SELECTING EVENTS TO REPORT TO PHONE 3			
		Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
		1	Alarms (for Norway/Sweden: also restores	1	Tampers (zones and box)
		2	Open/close	2	Short circuit
		3	Bypass	3	Sensor lost
		4	Zone trouble	4	Sensor low battery
		5	Power trouble (AC failure or low battery)	5	Expander trouble (incl. keypad)
		6	Siren & telephone fault	6	Failure to communicate
		7	Test reports	7	Alarm restore (Norway/Sweden: Reserved)
		8	Program, download, & log full	8	Tamper restore (Norway/Sweden: Reserved)
17	37	Reserved			

18	38	FORMAT OVERRIDE			
		Segment 1 (Circle Numbers To Program)		**Segment 2** (Circle Numbers To Program)	
		1	On = 1800hz transmit; Off = 1900hz	1	On = pager format (no handshake required)
		2	On = 2300hz handshake; Off = 1400hz	2	On = 1400/2300 handshake
		3	On =chksum parity; Off = double round par.	3	Reserved
		4	On = 2 digit event code; Off = 1 digit code	4	Reserved
		5	On = extended reporting; Off =non-extended	5	On = Contact ID
		6	Reserved	6	On = SIA
		7	On = 20 PPS; Off = 10 or 40 PPS	7	On = 3 digit event code
		8	On = 10 PPS; Off = 20 or 40 PPS	8	On = DTMF
		Segment 3 RESERVED			
		Segment 4 INTER-DIGIT TIME		**0-0-0-0**	

19	39	DOWNLOAD ACCESS CODE	**8-4-8-0-0-0-0-0**	
20	39	RINGS TO ANSWER DOWNLOAD	**8**	

21	39	DOWNLOAD CONTROL	
		Segment 1 (Circle Numbers To Program)	
		1	Enables two-call answering machine defeat
		2	Reserved
		3	Requires callback before downloading
		4	Shutdown control panel
		5	Lock out local programming
		6	Lock out communicator programming
		7	Lock out download section
		8	Enables callback at autotest interval

22	39	CALLBACK PHONE NUMBER	***14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14***	

23	40	FEATURE SELECTION					
		Segment 1		**Segment 2**		**Segment 3**	
		1	Quick Arm	1	LED extinguish enable	1	Open/Close
		2	Re-Exit	2	Require user code for bypassing zones	***2***	***Bypass***
		3	Auto Bypass (interior)	3	Bypass sounder alert	***3***	***Restore***
		4	Silent Panic	***4***	***AC power/ low battery sounder alert***	***4***	***Trouble***
		5	Audible Panic	5	Enables bypass toggle	***5***	***Tamper***
		6	Auxiliary 1	6	Enables silent auto arm	***6***	***Cancel***
		7	Auxiliary 2	7	Enables automatic instant (entry/exit)	7	Recent Closing
		8	***Multi Keypress Tamper***	8	Final set door	8	Exit Error
24	41	ENTRY/EXIT TIMERS					
		Segment 1 (Entry Time 1)			***30***		
		Segment 2 (Exit Time 1)			***60***		
		Segment 3 (Entry Time 2)			***30***		
		Segment 4 (Exit Time 2)			***60***		

25	43	ZONES 1-8, CONFIGURATION GROUPS	***3-5-6-6-6-6-6-6***	
26	43	Reserved		
27	43	Reserved		
28	43	Reserved		
29	43	Reserved		
31	43	Reserved		
32	43	Reserved		
33	43	Reserved		
34	43	Reserved		
35	43	Reserved		
36	43	Reserved		

37	44	SIREN AND SYSTEM SUPERVISION	
		Segment 1 (Circle Numbers To Program)	
		1	Reserved
		2	Reserved
		3	Siren blast at arming (pulse)
		4	Siren blast at exit delay expiration (pulse)
		5	Siren blast at closing kissoff (pulse)
		6	Siren sounds during a cross zone verification time
		7	***Siren sounds for a tamper***
		8	Siren blast once for keyswitch arming, twice for disarming
		Segment 2 (Circle Numbers To Program)	
		1	Convert siren driver to voltage out
		2	Siren sounds for expander trouble
		3	Zones to always restore
		4	Dynamic battery test performed upon arming
		5	***Battery missing test performed every 12 seconds***
		6	***Manual bell test performed during [*]-[4]-[4]test function***
		7	Manual communicator test performed during [*]-[4]-[4] test function
		8	**Box tamper enabled**
		Segment 3 (Circle Numbers To Program)	
		1	***Box Tamper report enabled***
		2	***AC Fail report enabled***
		3	***Low Battery report enabled***
		4	***Auxiliary power overcurrent report enabled***
		5	***Siren supervision report enabled***
		6	Reserved
		7	A+B Alarm (for Norway and Sweden only)
		8	***Expander trouble report enabled***
		Segment 4 (Circle Numbers To Program)	
		1	***Failure To Communicate report enabled***
		2	Log Full report enabled
		3	Autotest report enabled
		4	***Start and End Programming report enabled***
		5	***End Download report enabled***
		6	Sensor Low Battery report enabled
		7	Sensor Missing report enabled
		8	Autotest report enabled ONLY when system is armed
		Segment 5 (Circle Numbers To Program)	
		1	***Lost Clock service LED enable***
		2	Reserved
		3	Disable six on-board zones
		4	Enable two trips on the same cross-zone to activate the alarm
		5	Disable bypass reports for force armed zones
		6	***Silent exit***
		7	Reserved
		8	Automatic switch summer/wintertime and vice versa

38	45	SWINGER COUNTDOWN COUNT	**0**	

39	45	KEYPAD SOUNDER CONTROL	
		Segment 1 (Circle Numbers To Program)	
		1	Reserved
		2	Reserved
		3	Keypad sounds upon AC Power Failure
		4	Keypad sounds upon Low Battery Detection
		5	Keypad sounds during Cross Zone Trip Time
		6	***Keypad sounds for Tamper Alarm***
		7	Reserved
		8	Keypad sounds for Expander Trouble

40	45	SYSTEM TIMERS			
		Segment 1	Dynamic Battery Test duration (0-255 minutes)	***0***	
		Segment 2	AC Failure report delay (0-255 minutes)	***60***	
		Segment 3	Power Up Delay (0-60 seconds)	***0***	
		Segment 4	Siren Time (1-255 minutes)	***3***	
		Segment 5	Reserved	***0***	
		Segment 6	Cross Zone Time (0-255 minutes)	***5***	
		Segment 7	Chime Time in 50 msec. increments (0-255)	***3***	
		Segment 8	Dialler delay (0-255 seconds)	***0***	
		Segment 9	Fire Alarm Verification Time (120-255 seconds)	***0***	
		Segment 10	Listen-In Time (0-255 seconds)	***0***	

41	46	USER CODE REQUIREMENTS	
		Segment 1 (Circle Numbers To Program)	
		1	Enables six digit code option. All arm/disarm/Go To Program codes require six digits
		2	***Requires valid user code entry so that [*]-[9]-[8] and [*]-[9]-[9] functions can work***
		3-4	Reserved
		5	On : keypad shutdown mode
		6	On : user authorization to enter program mode
		7-8	Reserved

42	46	GO TO PROGRAM CODE	***9-7-1-3-0-0***	
43	46	GO TO PROGRAM CODE PARTITION AND AUTHORIZATION		
		Segment 1 (Circle Numbers To Program)		
		1	Reserved	
		2	Enables “Go To Program Code” as an arm only code	
		3	Enables “Go To Program Code” as an arm only code after closing	
		4	Enables “Go To Program Code” as a master arm/disarm code (can change user codes)	
		5	Enables “Go To Program Code” as an arm/disarm code	
		6	Enables “Go To Program Code” to bypass zones	
		7	Enables “Go To Program Code” opening and closing reports	
		8	Reserved	

44	46	DURESS CODE	***15-15-15-15-15-15***	

45	47	Reserved		
46	47	AUXILIARY OUTPUTS 1-2 SPECIAL TIMING		
		Segments	1	2
		Auxiliary output timed in minutes	1	1
		Auxiliary output to latch	2	***2***
		Auxiliary output to stop timing when user code is entered	***3***	3
		Auxiliary output to activate only between closing and opening time	4	4
		Auxiliary output to activate only between opening and closing time	5	5
		Invert auxiliary output (0 volts going to 12 volts when activated)	6	***6***
		Reserved	7	7
		Reserved	8	8

47	47	AUXILIARY OUTPUT 1, EVENT & TIME (open collector 1)		
		Segment 1	Program the event number for output 1	***7=Each siren activation***
		Segment 2	Program the timing for output 1	***0 sec.=follow event***
48	47	AUXILIARY OUTPUT 2, EVENT & TIME (open collector 2)		
		Segment 1	Program the event number for output 2	***7=Each siren activation***
		Segment 2	Program the timing for output 1	***0 sec.=follow event***
49-50	47	Reserved		

51	49	AUTOTEST CONTROL		
		Segment 1	Program a “1” if the interval is hours, or a “0” for days. Add a “2” to suppress the daily test or a “3” to suppress the hourly test	***0***
		Segment 2	Program the autotest interval from 1-255 days or hours	***1***
		Segment 3	Program the autotest report in 24 hour time format	***2***
		Segment 4	Program the autotest report time, minutes after the hour	***0***

52	49	OPENING TIME		
		Segment 1	Program the hour of the opening time	***8***
		Segment 2	Program the minutes after the hour of the opening time	***0***
53	49	CLOSING TIME / AUTO ARMING TIME		
		Segment 1	Program the hour of the closing time / auto arming time	***20***
		Segment 2	Program the minutes after hour of closing / auto arming time	***0***

54	50	DAYS OF THE WEEK WHEN “ARM ONLY AFTER CLOSE” WILL BE ABLE TO ARM/DISARM	
		1	***Sunday***
		2	***Monday***
		3	***Tuesday***
		4	***Wednesday***
		5	***Thursday***
		6	***Friday***
		7	***Saturday***
		8	***Reserved***

55	50	DAYS OF THE WEEK WHEN “AUTO ARMING” WILL OCCUR	
		1	Sunday
		2	Monday
		3	Tuesday
		4	Wednesday
		5	Thursday
		6	Friday
		7	Saturday
		8	Reserved

56	51	ALARM AND RESTORE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Alarm code	***0***	
		Segment 2-4	Reserved	***0***	
		Segment 5	Zone 1-8 Restore code	***0***	
		Segment 6-8	Reserved	***0***	
57	51	BYPASS COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Bypass code	***0***	
		Segment 2-8	Reserved	***0***	
58	51	TAMPER COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Tamper Code	***0***	
		Segment 2-8	Reserved	***0***	
59	52	TROUBLE COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Trouble Code	***0***	
		Segment 2-8	Reserved	***0***	
60	52	SENSOR LOW BATTERY COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Sensor Low Battery Code	***0***	
		Segment 2-8	Reserved	***0***	
61	52	SENSOR MISSING COMMUNICATOR CODE, SLOW SPEED FORMATS ONLY			
		Segment 1	Zone 1-8 Sensor Missing Code	***0***	
		Segment 2-8	Reserved	***0***	

		COMMUNICATOR CODES FOR SLOW SPEED FORMATS ONLY		
62	52	DURESS	***0-0***	
63	52	AUXILIARY 1 (fire)	***0-0***	
64	53	AUXILIARY 2 (medical alarm)	***0-0***	
65	53	KEYPAD PANIC	***0-0***	
66	53	KEYPAD MULTIPLE CODE ENTRY TAMPER	***0-0***	
67	53	BOX TAMPER / BOX TAMPER RESTORE	***0-0-0-0***	
68	53	AC FAIL / AC RESTORE	***0-0-0-0***	
69	54	LOW BATTERY / LOW BATTERY RESTORE	***0-0-0-0***	
70	54	POWER SHORT / POWER SHORT RESTORE	***0-0-0-0***	
71	54	BELL TAMPER / BELL TAMPER RESTORE	***0-0-0-0***	
72	54	Reserved	***0-0-0-0***	
73	54	B-ALARM (only for Norway/Sweden) fixed at 30 minutes	***0-0***	
74	54	EXPANDER TROUBLE / EXPANDER TROUBLE RESTORE	***0-0-0-0***	
75	55	FAILURE TO COMMUNICATE	***0-0***	
76	55	LOG FULL COMMUNICATOR CODE	***0-0***	

77	55	OPENING CODE COMMUNICATOR CODE			
		Segment 1	Opening Code for Codes 1-8	***0***	
		Segment 2-8	Reserved	***0***	
78	55	CLOSING COMMUNICATOR CODE			
		Segment 1	Closing Code for Codes 1-8	***0***	
		Segment 2-8	Reserved	***0***	

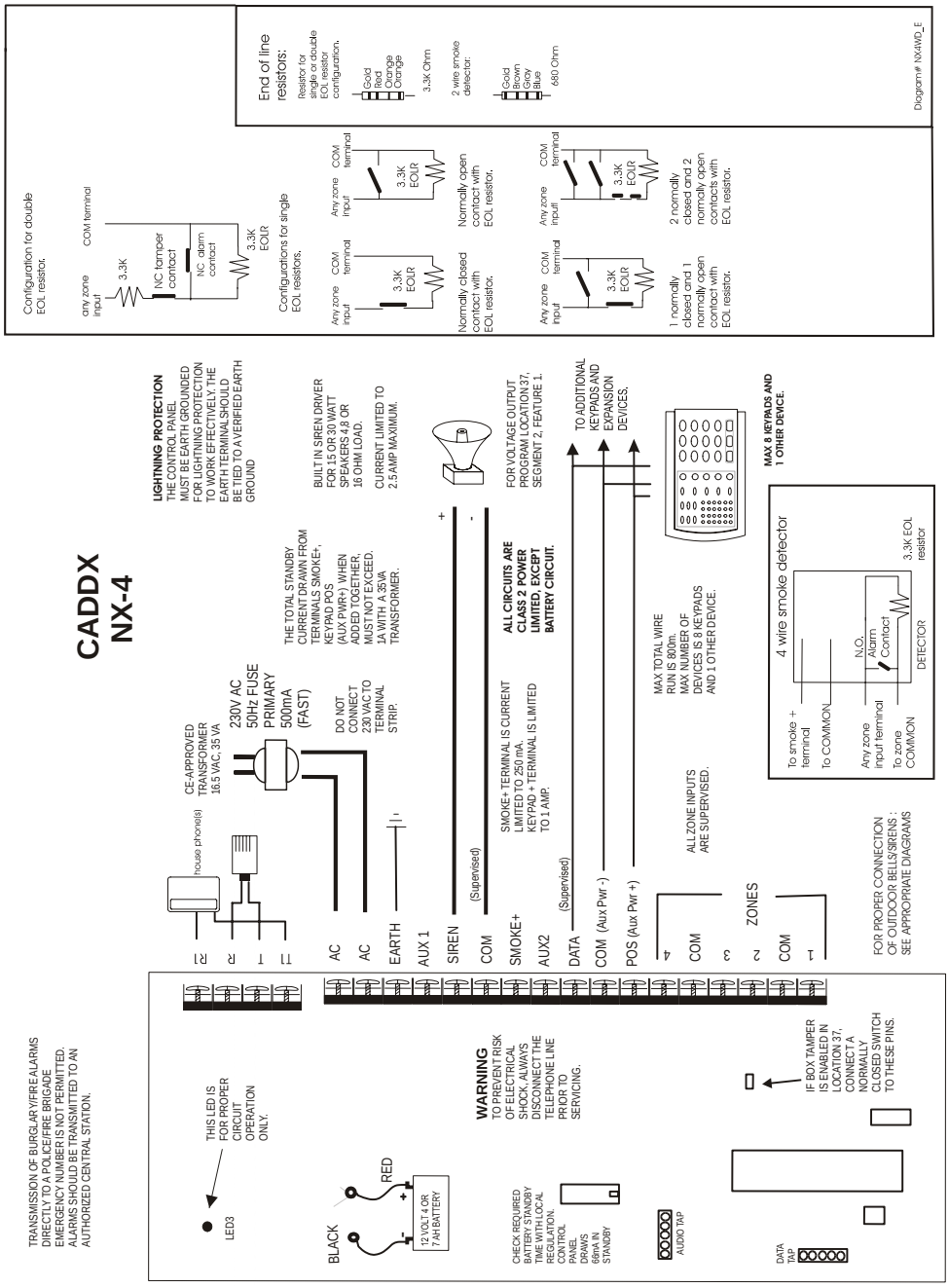
79	56	AUTOTEST COMMUNICATOR CODE	***0-0***	
80	56	RECENT CLOSING AND EXIT ERROR	***0-0***	
81	56	START PROGRAMMING / END PROGRAMMING	***0-0-0-0***	
82	56	RESERVED / END DOWNLOAD	***0-0-0-0***	
83	57	CANCEL COMMUNICATOR CODE	***0***	
84-109	57	RESERVED		

110	58	CONFIGURATION GROUP 1 ALARM CODE		***4***	
111	58	CONFIGURATION GROUP 1 CHARACTERISTIC SELECT			
		Segment 1 (Circle Numbers To Program)			
		1	Fire (enable for fire zone)	5	Delay 1 zone (enable to follow timer 1 entry/exit times)
		2	24 Hour (enable for non-fire 24 hour zone)	6	Delay 2 zone (enable to follow timer 1 entry / exit times)
		3	Keyswitch zone	7	Interior (enable for auto bypass or stay arming)
		4	Follower (enable for burglary zones that are instant during non-entry times)	8	Local only (enable if zone is not to be reported)
		Segment 2 (Circle Numbers To Program)			
		1	***Keypad audible on alarm***	***5***	***Bypassable***
		2	***Yelping siren on alarm***	6	Group shunt
		3	Steady siren on alarm	7	Force armable
		4	Chime	8	Entry guard
		Segment 3 (Circle Numbers To Program)			
		1	Fast loop response	***5***	***Dialer delay zone***
		2	***Double end of line tamper zone***	***6***	***Swinger zone***
		3	***Trouble zone (fire and day zone)***	***7***	***Restore reporting***
		4	Cross zone	***8***	***Listen-in***

THE DEFAULTS LISTED IN THE ODD-NUMBERED LOCATIONS BELOW REPRESENT THE THREE SEGMENTS OF EACH OF THOSE LOCATIONS. USE THE THREE SEGMENT CHARTS FROM LOCATION 111 TO UNDERSTAND THESE DEFAULTS.

112	59	CONFIGURATION GROUP 2 ALARM EVENT CODE	***2***	
113	59	CONFIGURATION GROUP 2 CHARACTERISTIC SELECT	***2-125-278***	
114	59	CONFIGURATION GROUP 3 ALARM EVENT CODE	***7***	
115	59	CONFIGURATION GROUP 3 CHARACTERISTIC SELECT	***5-125-25678***	
116	59	CONFIGURATION GROUP 4 ALARM EVENT CODE	***5***	
117	60	CONFIGURATION GROUP 4 CHARACTERISTIC SELECT	***45-125-25678***	
118	60	CONFIGURATION GROUP 5 ALARM EVENT CODE	***5***	
119	60	CONFIGURATION GROUP 5 CHARACTERISTIC SELECT	***457-125-25678***	
120	60	CONFIGURATION GROUP 6 ALARM EVENT CODE	***4***	
121	60	CONFIGURATION GROUP 6 CHARACTERISTIC SELECT	***0-125-25678***	
122	60	CONFIGURATION GROUP 7 ALARM EVENT CODE	***0***	
123	60	CONFIGURATION GROUP 7 CHARACTERISTIC SELECT	***2-5-278***	
124	61	CONFIGURATION GROUP 8 ALARM EVENT CODE	***1***	
125	61	CONFIGURATION GROUP 8 CHARACTERISTIC SELECT	***1-13-378***	
126	61	CONFIGURATION GROUP 9 ALARM EVENT CODE	***7***	
127	61	CONFIGURATION GROUP 9 CHARACTERISTIC SELECT	***6-125-25678***	
128	61	CONFIGURATION GROUP 10 ALARM EVENT CODE	***13***	
129	61	CONFIGURATION GROUP 10 CHARACTERISTIC SELECT	***24-12-78***	
130	62	CONFIGURATION GROUP 11 ALARM EVENT CODE	***3***	
131	62	CONFIGURATION GROUP 11 CHARACTERISTIC SELECT	***3-0-2***	
132	62	CONFIGURATION GROUP 12 ALARM EVENT CODE	***5***	
133	62	CONFIGURATION GROUP 12 CHARACTERISTIC SELECT	***457-125-245678***	
134	62	CONFIGURATION GROUP 13 ALARM EVENT CODE	***4***	
135	62	CONFIGURATION GROUP 13 CHARACTERISTIC SELECT	***0-1258-25678***	
136	63	CONFIGURATION GROUP 14 ALARM EVENT CODE	***7***	
137	63	CONFIGURATION GROUP 14 CHARACTERISTIC SELECT	***5-1256-25678***	
138	63	CONFIGURATION GROUP 15 ALARM EVENT CODE	***5***	
139	63	CONFIGURATION GROUP 15 CHARACTERISTIC SELECT	***457-1256-25678***	
140	63	CONFIGURATION GROUP 16 ALARM EVENT CODE	***4***	
141	63	CONFIGURATION GROUP 16 CHARACTERISTIC SELECT	***0-1256-25678***	
142	64	CONFIGURATION GROUP 17 ALARM EVENT CODE	***3***	
143	64	CONFIGURATION GROUP 17 CHARACTERISTIC SELECT	***38-0-2***	
144	64	CONFIGURATION GROUP 18 ALARM EVENT CODE	***7***	
145	64	CONFIGURATION GROUP 18 CHARACTERISTIC SELECT	***5-1257-25678***	
146	64	CONFIGURATION GROUP 19 ALARM EVENT CODE	***7***	
147	64	CONFIGURATION GROUP 19 CHARACTERISTIC SELECT	***6-1257-25678***	
148	65	CONFIGURATION GROUP 20 ALARM EVENT CODE	***7***	
149	65	CONFIGURATION GROUP 20 CHARACTERISTIC SELECT	***5-1245-25678***	

NX-4 WIRING DIAGRAM


Configuration for double EOL resistor.
any zone input
COM terminal
3.3K
NC tamper contact
NC alarm contact
3.3K EOLR
Configurations for single EOL resistors.
Any zone input
COM terminal
3.3K EOLR
Normally closed contact with EOL resistor.
Any zone input
COM terminal
3.3K EOLR
Normally open contact with EOL resistor.
Any zone input
COM terminal
3.3K EOLR
1 normally closed and 1 normally open contact with EOL resistor.
Any zone input
COM terminal
3.3K EOLR
2 normally closed and 2 normally open contacts with EOL resistor.
End of line resistors:
Resistor for single or double EOL resistor configuration.
Gold Red Orange Orange
3.3K Ohm
2 wire smoke detector.
Gold Brown Gray Blue
680 Ohm
Diagram# NX4MD_E
CADDX NX-4
LIGHTNING PROTECTION
THE CONTROL PANEL MUST BE EARTH GROUNDED FOR LIGHTNING PROTECTION TO WORK EFFECTIVELY. THE EARTH TERMINAL SHOULD BE TIED TO A VERIFIED EARTH GROUND
CE APPROVED TRANSFORMER 16.5 VAC, 35 VA
230V AC 50Hz FUSE PRIMARY 500mA (FAST)
house phone(s)
DO NOT CONNECT 230 VAC TO TERMINAL STRIP.
THE TOTAL STANDBY CURRENT DRAWN FROM TERMINALS SMOKE+, KEYPAD POS (AUX PWR+) WHEN ADDED TOGETHER, MUST NOT EXCEED 1A WITH A 35VA TRANSFORMER.
BUILT IN SIREN DRIVER FOR 15 OR 30 WATT SPEAKERS 4-8 OR 16 OHM LOAD.
CURRENT LIMITED TO 2.5 AMP MAXIMUM.
ALL CIRCUITS ARE CLASS 2 POWER LIMITED, EXCEPT BATTERY CIRCUIT.
SMOKE+ TERMINAL IS CURRENT LIMITED TO 250 mA. KEYPAD + TERMINAL IS LIMITED TO 1 AMP.
FOR VOLTAGE OUTPUT PROGRAM LOCATION 37, SEGMENT 2, FEATURE 1.
TO ADDITIONAL KEYPADS AND EXPANSION DEVICES.
MAX TOTAL WIRE RUN IS 500m. MAX NUMBER OF DEVICES IS 8 KEYPADS AND 1 OTHER DEVICE.
MAX 8 KEYPADS AND 1 OTHER DEVICE.
ALL ZONE INPUTS ARE SUPERVISED.
4 wire smoke detector
To smoke + terminal
To COMMON
Any zone input terminal
To zone COMMON
N.O. Alarm Contact
3.3K EOL resistor
DETECTOR
FOR PROPER CONNECTION OF OUTDOOR BELLS/SIRENS : SEE APPROPRIATE DIAGRAMS
R1 R T1 T AC AC EARTH AUX 1 SIREN COM SMOKE+ AUX2 DATA COM (Aux Pwr -) POS (Aux Pwr +) 4 COM 3 2 ZONES COM 1
(Supervised)
(Supervised)
TRANSMISSION OF BURGLARY/FIRE ALARMS DIRECTLY TO A POLICE/FIRE BRIGADE EMERGENCY NUMBER IS NOT PERMITTED. ALARMS SHOULD BE TRANSMITTED TO AN AUTHORIZED CENTRAL STATION.
THIS LED IS FOR PROPER CIRCUIT OPERATION ONLY.
LED3
WARNING
TO PREVENT RISK OF ELECTRICAL SHOCK, ALWAYS DISCONNECT THE TELEPHONE LINE PRIOR TO SERVICING.
BLACK
RED
12 VOLT 4 OR 7 AH BATTERY
CHECK REQUIRED BATTERY STANDBY TIME WITH LOCAL REGULATION. CONTROL PANEL DRAWS 66mA IN STANDBY
AUDIO TAP
DATA TAP
IF BOX TAMPER IS ENABLED IN LOCATION 37, CONNECT A NORMALLY CLOSED SWITCH TO THESE PINS.

TERMINAL DESCRIPTION

TERMINAL	DESCRIPTION
R1	House Telephone Ring.
R	Telephone Ring.
T	Telephone Tip.
T1	House Telephone Tip.
AC	AC input. Connect to a 16.5V 35VA CE approved transformer.
EARTH	Earth Ground.
AUX 1	Connect negative lead of low current device [relay, LED (install 1K Ω resistor in series with LED), etc.]. Connect positive lead of device to KEYPAD +. Current is limited to 250 mA when output is negative, and 250 µA when output is positive.
SIREN	If used as a siren output (default), the speaker rating should be 15 watt at 8 or 16 ohm, or 30/40 watt at 4, 8, or 16 ohms. If voltage output is selected in location 37, this output becomes voltage output, 12VDC, 1 Amp maximum load. **NOTE: A 3.3KW resistor may be required across the bell terminals when a 12 VDC siren is used. If no resistor is used, you may experience voltage leakage into the siren, which will cause these devices to output a small signal.**
COM	Connect the negative wire of powered devices such as motion and smoke detectors.
SMOKE+	Smoke detector power 12VDC, 250 mA maximum.
AUX 2	Connect negative lead of low current device [relay, LED (install 1K Ω resistor in series with LED), etc.]. Connect positive lead of device to KEYPAD +. Current is limited to 250 mA when output is negative, and 250µA when output is positive.
KP DATA	Connect to the data terminal on the keypads and the expanders. Maximum wire run is 800 m with 2 mm² wire. The minimum wire sizes at 75, 150, 300 and 600 m are 0.12, 0.33, 0.83 and 1.3 mm² respectively. These numbers are for one keypad at the end of the wire and a voltage drop of max. 2 Volts. When connecting more than one keypad to the end of the wire, a higher gauge wire will be required. The maximum number of devices are max. 8 keypads and max 1 expander.
COM **AUX PWR -**	Connect to the Common terminal on the keypads, expanders, and other power devices.
POS **AUX PWR +**	Connect to the Positive terminal on the keypads, expanders, and other power devices. This terminal is limited to 1 amp total current.
ZONE 4	Connect to one side of zone 4 loop. Connect the other side to the COM terminal. Open or short causes alarm.
COM	Common (-) terminal for zones 3 & 4.
ZONE 3	Connect to one side of zone 3 loop. Connect the other side to COM terminal. Open or short causes alarm.
ZONE 2	Connect to one side of zone 2 loop. Connect the other side to the COM terminal. Open or short causes alarm.
COM	Common (-) terminal for zones 1 & 2.
ZONE 1	Connect to one side of zone 1 loop. Connect the other side to COM terminal. Open or short causes alarm.

TECHNICAL SPECIFICATIONS

Technical specifications NX-4

Operating power	
- Nominal	16.5 Vac, 50/60Hz, 35VA
- Minimum/maximum	14.05 Vac - 18.15 Vac
Current consumption	66 mA
Battery	max. 12V/7Ah
Auxiliary Power	
- Nominal	13.85 Vdc/1.5 A
- Maximum	13.85 Vdc/1.7 A (1A for devices, 0.7A for battery)
Operating temperature	0 - 50° C
Loop resistance	
- Standard loop	300 Ohms maximum
- 2-wire fire loop	30 Ohms maximum
Built-in siren driver	112 dB, 2 tones (steady or yelp)
Loop response	selectable: 50 ms or 500 ms
Dimensions (PCB board only)	223 x 90 mm
Weight (PCB board only)	206 g

Technical specifications NX-108, NX-116, NX-124

Operating power			
- Nominal	12 Vdc		
- Minimum/maximum	9 Vdc - 14 Vdc		
Operating temperature	0 - 50° C		
Dimensions	163 x 102 x 26 mm		
Current consumption	**NX-108**	**NX-116**	**NX-124**
- Minimum (quiescent, no lighting)	10 mA	10 mA	10 mA
- Nominal (quiescent, lighting ON)	29 mA	29 mA	29 mA
Current consumption in alarm			
- 1 zone in alarm, sounder/lighting ON	42 mA	42 mA	42 mA
- Maximum (all LED's ON, sounder ON)	90 mA	110 mA	130 mA
Weight	228 g	230 g	232 g

Technical specifications NX-1308, NX-1316, NX-1324

Operating power			
- Nominal	12 Vdc		
- Minimum/maximum	9 Vdc - 14 Vdc		
Operating temperature	0 - 50° C		
Dimensions	158 x 135x 30 mm		
Current consumption	**NX-1308**	**NX-1316**	**NX-1324**
- Minimum (quiescent, no lighting)	23 mA	23 mA	23 mA
- Nominal (quiescent, lighting ON)	29 mA	29 mA	29 mA
Current consumption in alarm			
- 1 zone in alarm, sounder/lighting ON	55 mA	47 mA	55 mA
- Maximum (all LED's ON, sounder ON)	90 mA	110 mA	130 mA
Weight	264 g	264 g	270 g

Technical specifications NX-148

Operating power	
- Nominal	12 Vdc
- Minimum/maximum	9 Vdc - 14 Vdc
Operating temperature	0 - 50° C
Dimensions	158 x 135 x 30 mm
Current consumption	
- Minimum (quiescent, no lighting)	20 mA
- Nominal (quiescent, minimum lighting)	25 mA
- Nominal (quiescient, maximum lighting)	48 mA
Current consumption in alarm	
- 1 zone in alarm, sounder/lighting ON	65 mA
- Maximum (all LED's ON, sounder ON)	110 mA
Weight	290 g

APPENDIX 1: REPORTING FIXED CODES IN CONTACT-ID AND SIA

The table below lists the event codes sent for the following reports (if enabled) when using CONTACT ID or SIA formats.

REPORT	CONTACT ID	SIA
MANUAL TEST	601	RX
AUTOTEST	602	RP
OPEN (User Number)	401	OP
CLOSE (User Number)	401	CL
CANCEL (User Number)	406	OC
DOWNLOAD COMPLETE	412	RS
START PROGRAM	627	LB
END PROGRAM	628	LX
RECENT CLOSE (User Number)	401	CR
EXIT ERROR (User Number)	457	EE
EVENT LOG FULL	605	JL
FAIL TO COMMUNICATE	354	RT
EXPANDER TROUBLE (device number)	333	ET
EXPANDER RESTORE (device number)	333	ER
TELEPHONE FAULT	351	LT
TELEPHONE RESTORE	351	LR
SIREN TAMPER	321	YA
SIREN RESTORE	321	YH
AUX POWER OVERCURRENT (device number)	312	YP
AUX POWER RESTORE (device number)	312	YQ
LOW BATTERY (device number)	309	YT
LOW BATTERY RESTORE (device number)	309	YR
AC FAIL (device number)	301	AT
AC RESTORE (device number)	301	AR
BOX TAMPER (device number)	137	TA
BOX TAMPER RESTORE (device number)	137	TR
KEYPAD TAMPER	137	TA
KEYPAD PANIC	120	PA
DURESS	121	HA
KEYPAD AUXILIARY 1	110	FA
KEYPAD AUXILIARY 2	100	MA
RF SENSOR LOST (zone number)	381	*T
RF SENSOR RESTORE (zone number)	381	*R
SENSOR LOW BATTERY (zone number)	384	XT
SENSOR BATTERY RESTORE (zone number)	384	XR
ZONE TROUBLE (zone number)	380	*T
ZONE TROUBLE RESTORE (zone number)	380	*R
ZONE TAMPER (zone number)	137	TA
ZONE TAMPER RESTORE (zone number)	137	TR
ZONE BYPASS (zone number)	570	*B
BYPASS RESTORE (zone number)	570	*U

THE NUMBER IN PARENTHESES FOLLOWING THE EVENT IS THE NUMBER THAT WILL BE REPORTED AS THE ZONE NUMBER. IF THERE ARE NO PARENTHESES , THE ZONE WILL BE “0”. SEE APPENDIX 3 FOR THE DEVICE NUMBERS.

* The character transmitted in this slot will be the first character from the event code of the zone that is bypassed or in trouble. (See locations 110 - 149)

APPENDIX 2: REPORTING ZONE CODES IN SIA OR CONTACT ID

The NX-4 has the ability to report SIA level 1 transmissions to either or both phone numbers. Each report in SIA consists of an Event Code and a Zone or User ID. The Zone ID will be the zone number that is in alarm. The event code will come from the chart below, and it will be programmed in the configuration group event code.

Programmed Event Code	SIA Code	Description
0	HA	Holdup Alarm
1	FA	Fire Alarm
2	PA	Panic alarm
3	BA	Burglary Alarm
4	BA	Burglary Alarm
5	BA	Burglary Alarm
6	UA	Untyped Alarm
7	BA	Burglary Alarm
8	BA	Burglary Alarm
9	UA	Untyped Alarm
10	HA	Holdup Alarm
11	MA	Medical Alarm
12	PA	Panic alarm
13	TA	Tamper Alarm
14	RP	Periodic Test
15	GA	Gas Alarm
16	KA	Heat Alarm
17	WA	Water Alarm
18	QA	Emergency Alarm
19	SA	Sprinkler Alarm
20	ZA	Freeze Alarm

The NX-4 can report Ademco Contact ID transmissions. Each report in Contact ID consists of an Event Code and a Zone ID. The zone ID is the zone that generated the alarm. The event code will come from the chart below, and it will be programmed in the configuration group event code.

Programmed Event Code	CONTACT-ID	Description
0	122	Silent Panic
1	110	Fire Alarm
2	120	Panic alarm
3	130	Burglary Alarm
4	131	Perimeter Alarm
5	132	Interior Alarm
6	133	24 Hour Burglary
7	134	Entry Alarm
8	135	Day/Night Alarm
9	150	Non Burglary 24 Hour
10	121	Duress Alarm
11	100	Medical Alarm
12	123	Audible Panic Alarm
13	137	Tamper Alarm
14	602	Periodic Test
15	151	Gas Detected
16	158	High Temp
17	154	Water Leakage
18	140	General Alarm
19	140	General Alarm
20	159	Low Temp

APPENDIX 3: EXPANDER NUMBERS FOR REPORTING EXPANDER TROUBLE

The tables below list the device numbers that will be reported for each keypad where a trouble condition is present. For trouble conditions relating to the control panel, the device number is “0”.

Keypads

KEYPAD	NUMBER
1	192
2	200
3	208
4	216
5	224
6	232
7	240
8	248

CE DECLARATION

98/482/EC declaration

(Applies to all products that have the CE mark attached)

This equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, if itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in first instance.

www.interlogixinc.com

SLC Distibution is a division of Interlogix N.V.

COPYRIGHT ©2001

© Interlogix N.V. All rights reserved. Interlogix N.V. grants the right to reprint this manual for internal use only. Interlogix N.V. reserves the right to change information without notice.